TEST REPORT

CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 15, Subpart C (Section 15.247)**
Report No.:	RFBHQZ-WTW-P23030988
FCC ID:	AK8J20H105
Product:	WLAN/BT Combo Module(WiFi 6E)
Brand:	FOXCONN
Model No.:	J20H105
Received Date:	2023/3/31
Test Date:	2023/5/10 ~ 2023/6/10
Issued Date:	2023/6/20
Applicant:	Sony Group Corporation
Address:	1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan
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:** **2023/6/20**

May Chen / Manager

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Prepared by : Phoebe Wang / Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBHQZ-WTW-P23030988	Original release.	2023/6/20

1 Certificate

Product:	WLAN/BT Combo Module(WiFi 6E)
Brand:	FOXCONN
Test Model:	J20H105
Sample Status:	Engineering sample
Applicant:	Sony Group Corporation
Test Date:	2023/5/10 ~ 2023/6/10
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	Pass	Meet the requirement of limit.
15.247(e)	Power Spectral Density	Pass	Meet the requirement of limit.
15.247(a)(2)	6 dB Bandwidth	Pass	Meet the requirement of limit.
15.247(d)	Conducted Out of Band Emissions	Pass	Meet the requirement of limit.
15.207	AC Power Conducted Emissions	Pass	Minimum passing margin is -25.82 dB at 28.26172 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -14.8 dB at 54.29 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.1 dB at 2390.00 MHz
15.203	Antenna Requirement	Pass	No antenna connector is used.

Note: 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:

Parameter	Specification	Expanded Uncertainty (k=2) (±)
Conducted Out of Band Emissions	9 kHz ~ 40 GHz	2.5 dB
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	WLAN/BT Combo Module(WiFi 6E)
Brand	FOXCONN
Test Model	J20H105
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
Modulation Technology	DSSS, OFDM, OFDMA
Transfer Rate	802.11b: up to 11 Mbps 802.11g: up to 54 Mbps 802.11n: up to 144.4 Mbps VHT: up to 173.3 Mbps 802.11ax: up to 286.8 Mbps
Operating Frequency	2.412 GHz ~ 2.462 GHz
Number of Channel	802.11b, 802.11g, 802.11n (HT20), VHT20, 802.11ax (HE20): 11
Output Power	666.802 mW (28.24 dBm)

Note:

1. There are WLAN (2.4GHz & 5GHz & 6GHz) and Bluetooth technology used for the EUT.
2. Simultaneously transmission condition.

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

3. 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.

Antenna NO.	Antenna Net Gain(dBi)	Frequency range (GHz)	Antenna Type
WiFi 0	0.19	2.4~2.4835	Monopole
	1.74	5.15~5.25	
	1.41	5.25~5.35	
	2.97	5.47~5.725	
	2.2	5.725~5.85	
	2.5	5.925~6.425	
	2.76	6.425~6.525	
	2.9	6.525~6.875	
	2.74	6.875~7.125	
WiFi 1	3.5	2.4~2.4835	Monopole
	1.84	5.15~5.25	
	1.9	5.25~5.35	
	2.3	5.47~5.725	
	2.1	5.725~5.85	
	2.3	5.925~6.425	
	1.11	6.425~6.525	
	1.83	6.525~6.875	
	3.66	6.875~7.125	
BT 0	1.5	2.4~2.4835	PIFA
BT 1	0.2	2.4~2.4835	PIFA

* 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**	
802.11b	2TX	2RX
802.11g	2TX	2RX
802.11n (HT20)	2TX	2RX
VHT20	2TX	2RX
802.11ax (HE20)	2TX	2RX

Note:

1. The modulation and bandwidth are similar for 802.11n mode for 20 MHz, VHT20 mode for 20 MHz and 802.11ax mode for 20 MHz, therefore the manufacturer will control the power for 802.11n/ VHT mode is the same as the 802.11ax mode or more lower than it and investigated worst case to representative mode in test report.

3.3 Channel List

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

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

3.4 Test Mode Applicability and Tested Channel Detail

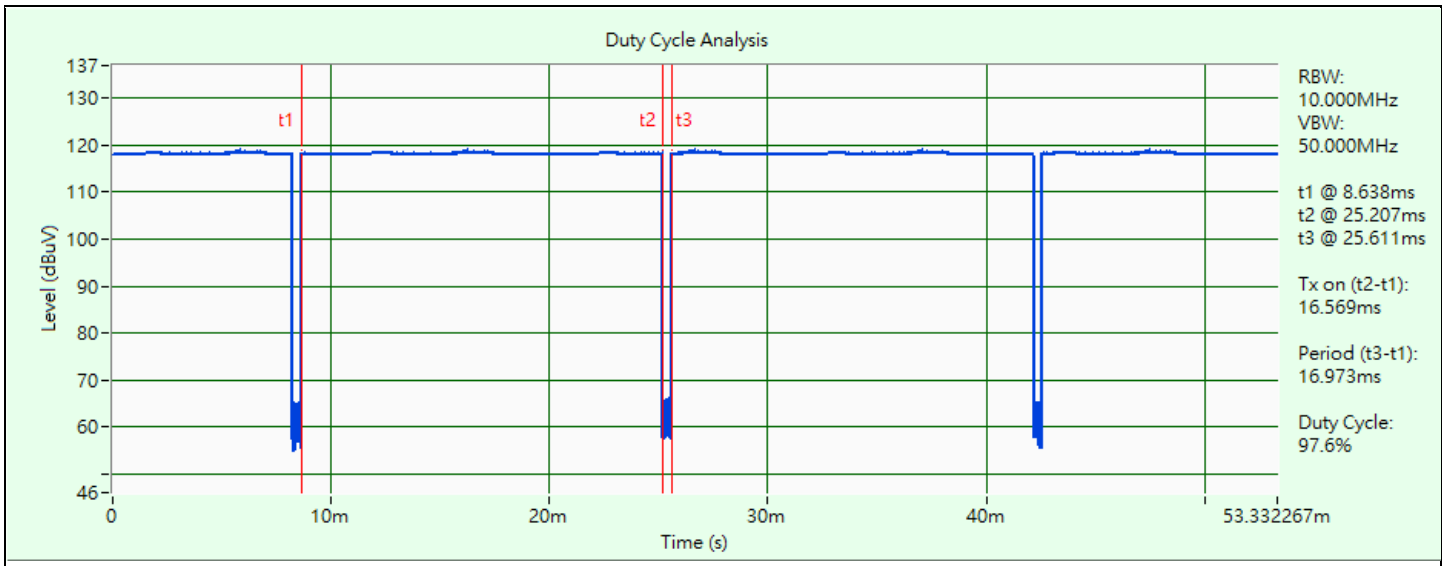
Pre-Scan:	1. EUT can be used in the following ways: X-axis/ Y-axis/ Z-axis. Pre-scan these ways and find the worst case as a representative test condition. 2. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
Worst Case:	1. X-axis/ Y-axis/ Z-axis Worst Condition: X-axis

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

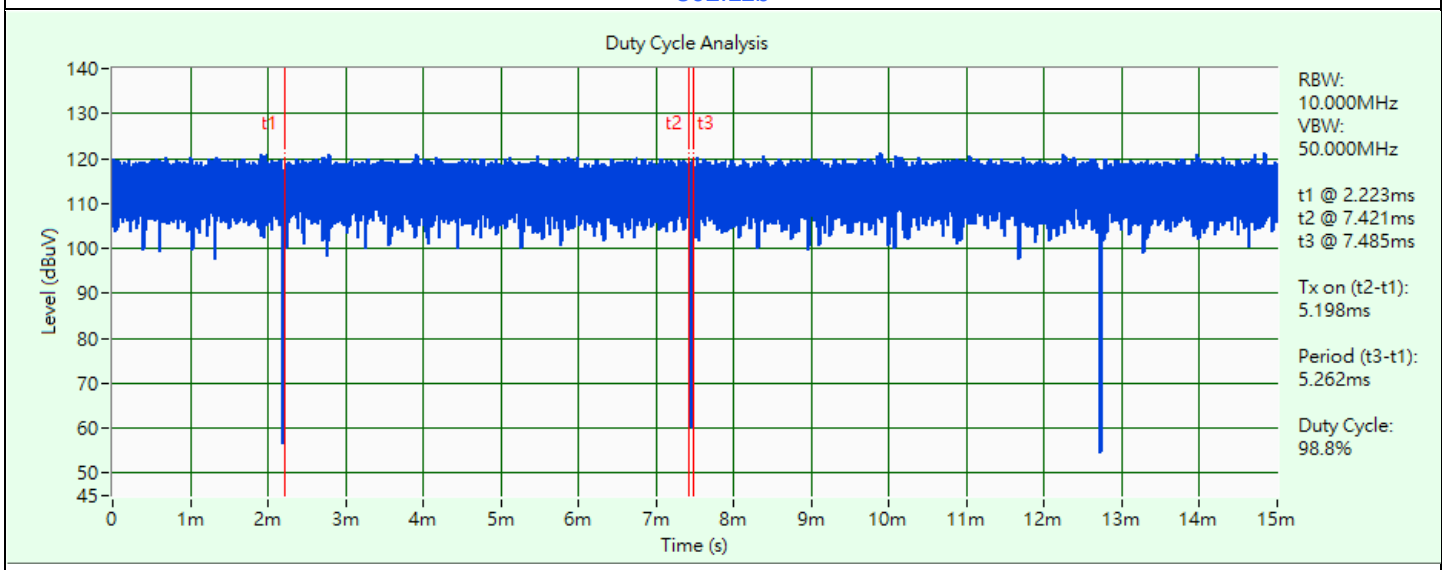
Test Item	Mode	Tested Channel	Modulation	Data Rate Parameter
RF Output Power	802.11b	1, 6, 11	DBPSK	1Mb/s
	802.11g	1, 6, 11	BPSK	6Mb/s
	VHT20	1, 6, 11	BPSK	MCS0
	802.11ax (HE20)	1, 6, 11	BPSK	MCS0
6 dB Bandwidth/ Power Spectral Density / Conducted Out of Band Emissions	802.11b	1, 6, 11	DBPSK	1Mb/s
	802.11g	1, 6, 11	BPSK	6Mb/s
	802.11ax (HE20)	1, 6, 11	BPSK	MCS0
AC Power Conducted Emissions	802.11b	6	DBPSK	1Mb/s
Unwanted Emissions below 1 GHz	802.11b	6	DBPSK	1Mb/s
Unwanted Emissions above 1 GHz	802.11b	1, 6, 11	DBPSK	1Mb/s
	802.11g	1, 6, 11	BPSK	6Mb/s
	802.11ax (HE20)	1, 6, 11	BPSK	MCS0
Note: Partial RU (resource unit) reduction mechanisms are not supported.				

3.5 Duty Cycle of Test Signal

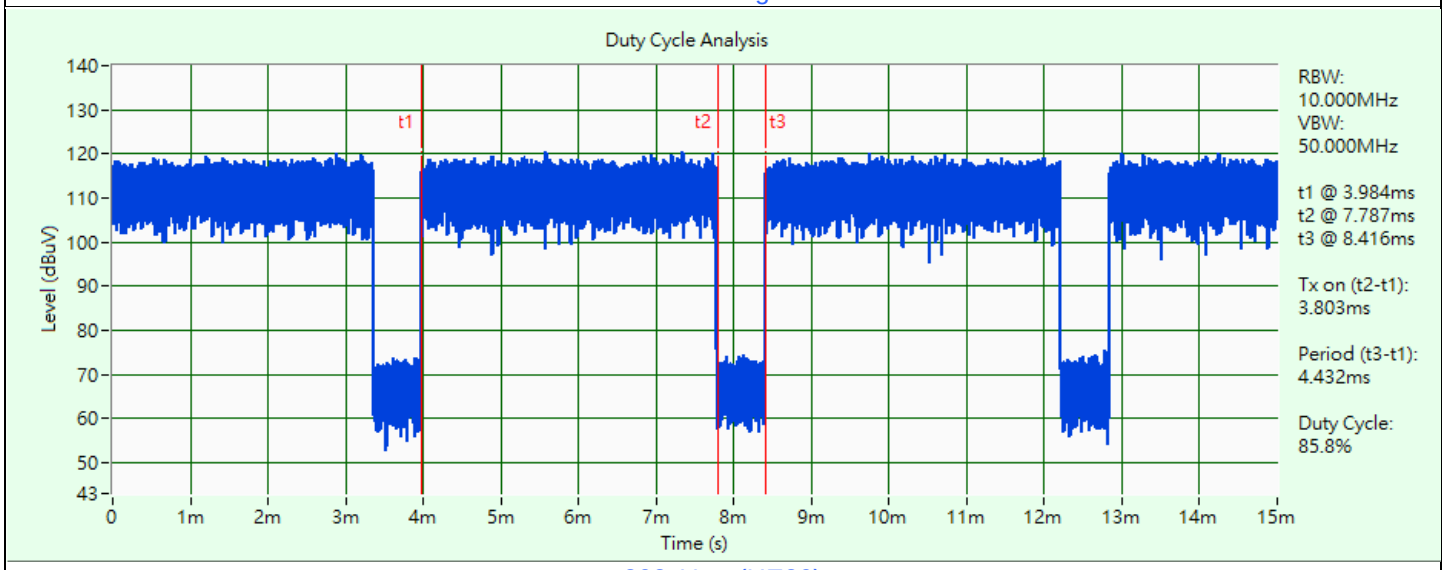
802.11b: Duty cycle = 16.569 ms / 16.973 ms x 100% = 97.6%, duty factor = 10 * log (1/Duty cycle) = 0.10 dB
802.11g: Duty cycle = 5.198 ms / 5.262 ms x 100% = 98.8%
802.11ax (HE20): Duty cycle = 3.803 ms / 4.432 ms x 100% = 85.8%, duty factor = 10 * log (1/Duty cycle) = 0.66 dB



802.11b



802.11g



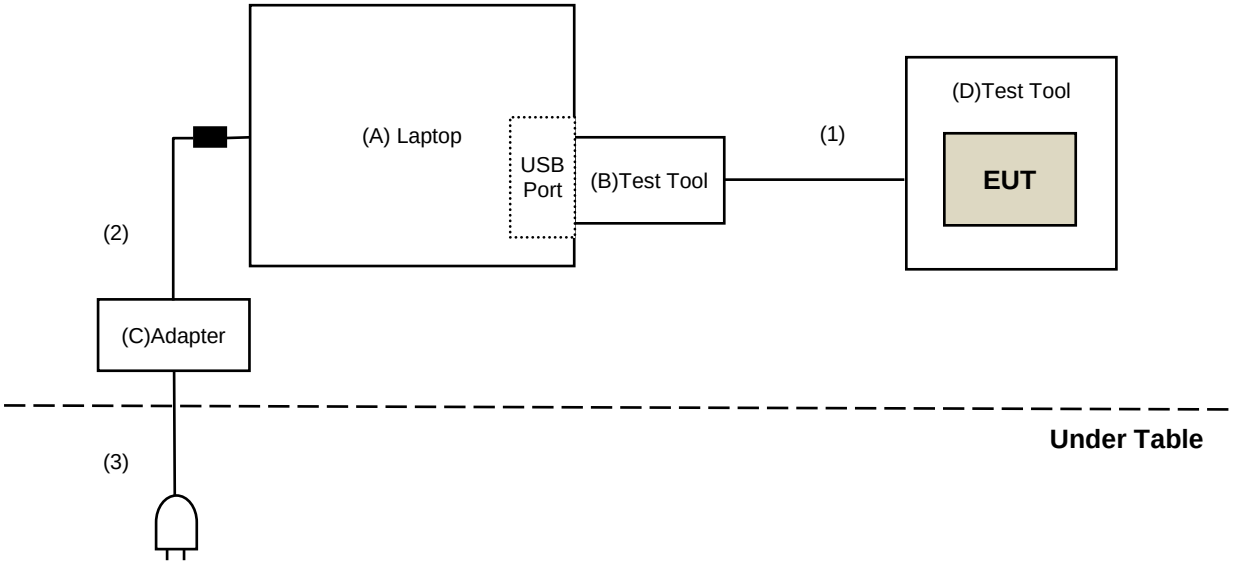
802.11ax (HE20)

3.6 Test Program Used and Operation Descriptions

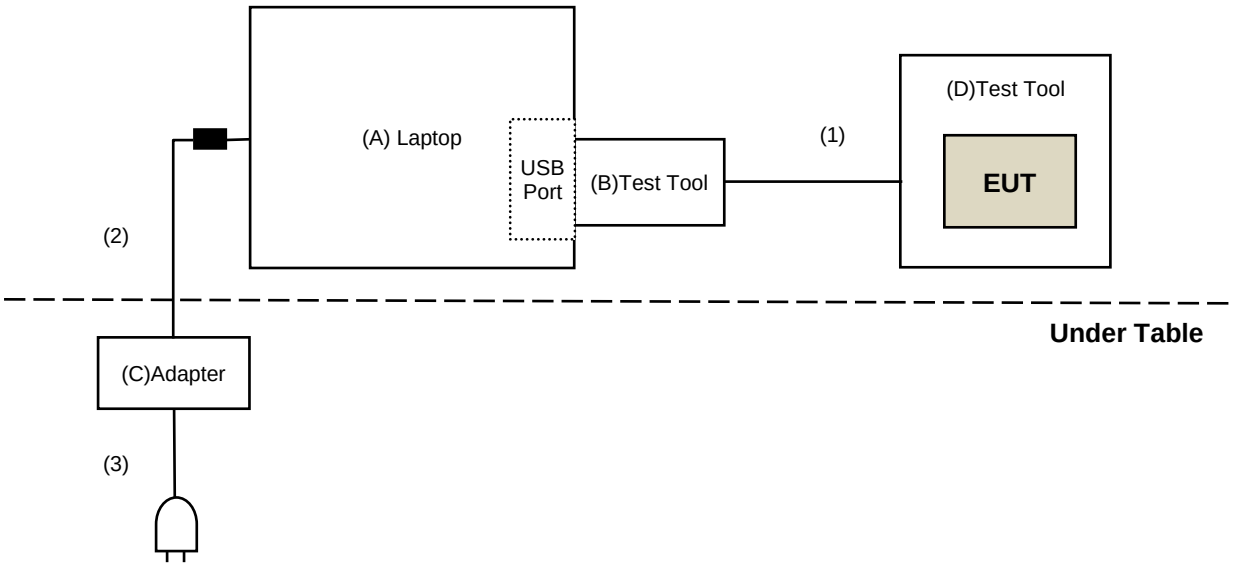
Controlling software (QATool_Dbg) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

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	E6420	B92T3R1	QDS-BRCM1005-D	Provided by Lab
B	Test Tool	Foxconn	NA	NA	NA	Supplied by applicant
C	Adapter	Dell	FA65NE0-00	NA	NA	Provided by Lab
D	Test Tool	Sony	NA	NA	NA	Supplied by applicant

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	Console Cable	1	0.3	No	0	Supplied by applicant
2	DC Cable	1	1.8	No	1	Provided by Lab
3	AC Cable	1	1	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 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	MDCS18N-10	MDCS18N-10-01	2023/3/27	2024/3/26
Power Meter Anritsu	ML2495A	1529002	2022/6/22	2023/6/21
Pulse Power Sensor Anritsu	MA2411B	1726434	2022/6/22	2023/6/21

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2023/6/10

4.2 Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	MDCS18N-10	MDCS18N-10-01	2023/3/27	2024/3/26
MXA Signal Analyzer Keysight	N9020B	MY60112409	2023/2/18	2024/2/17
Software	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2023/6/10

4.3 6 dB Bandwidth

Refer to section 4.2 to get information of the instruments.

4.4 Conducted Out of Band Emissions

Refer to section 4.2 to get information of the instruments.

4.5 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance	N/A	EMC-01	2022/9/27	2023/9/26
EMI Test Receiver R&S	ESCS 30	847124/029	2022/10/14	2023/10/13
Fixed Attenuator STI	STI02-2200-10	005	2022/8/24	2023/8/23
LISN R&S	ESH3-Z5	848773/004	2022/10/18	2023/10/17
RF Coaxial Cable JYEBO	5D-FB	COCCAB-001	2022/8/24	2023/8/23
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: 2023/6/2

4.6 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-406	2022/10/21	2023/10/20
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Fixed Attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-03	2022/12/28	2023/12/27
Loop Antenna Electro-Metrics	EM-6879	264	2023/2/21	2024/2/20
MXE EMI Receiver Keysight	N9038A	MY54450088	2022/7/11	2023/7/10
Preamplifier Agilent	8447D	2944A10636	2023/3/12	2024/3/11
Preamplifier EMCI	EMC330N	980701	2023/2/18	2024/2/17
PXA Signal Analyzer Keysight	N9030B	MY57142938	2023/4/6	2024/4/5
RF Coaxial Cable COMMATE/PEWC	8D	966-4-1	2023/2/18	2024/2/17
		966-4-2	2023/2/18	2024/2/17
		966-4-3	2023/2/18	2024/2/17
RF Coaxial Cable JYEBO	5D-FB	LOOPCAB-001	2022/12/19	2023/12/18
		LOOPCAB-002	2022/12/19	2023/12/18
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: 2023/5/31

4.7 Unwanted Emissions above 1 GHz

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	2022/11/13	2023/11/12
	BBHA 9170	9170-739	2022/11/13	2023/11/12
Preamplifier EMCI	EMC12630SE	980688	2022/10/4	2023/10/3
	EMC184045SE	980387	2022/12/28	2023/12/27
PXA Signal Analyzer Keysight	N9030B	MY57142938	2023/4/6	2024/4/5
RF Coaxial Cable EMCI	EMC-KM-KM-4000	200214	2023/2/20	2024/2/19
	EMC102-KM-KM-1200	160924	2022/12/28	2023/12/27
	EMC104-SM-SM-1200	160922	2022/12/15	2023/12/14
	EMC104-SM-SM-2000	180502	2023/3/27	2024/3/26
	EMC104-SM-SM-6000	210704	2022/11/4	2023/11/3
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: 2023/5/10 ~ 2023/5/29

5 Limits of Test Items

5.1 RF Output Power

For systems using digital modulation in the 2400–2483.5 MHz bands: 1 Watt (30 dBm)

Per KDB 662911 D01 Multiple Transmitter Output Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};
Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

5.2 Power Spectral Density

The Maximum of Power Spectral Density Measurement is 8 dBm in any 3 kHz.

5.3 6 dB Bandwidth

The minimum of 6 dB Bandwidth Measurement is 0.5 MHz.

5.4 Conducted Out of Band Emissions

Below 20 dB of the highest emission level of operating band (in 100 kHz Resolution Bandwidth).

5.5 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.

5.6 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).

5.7 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 shall be at least 20 dB below the highest level of the desired power:

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

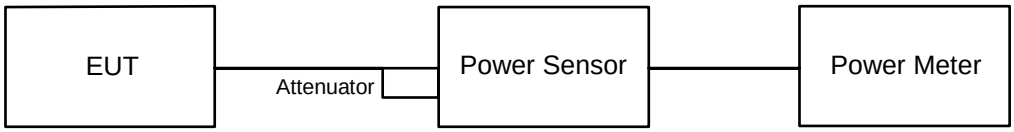
Notes:

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 RF Output Power

6.1.1 Test Setup



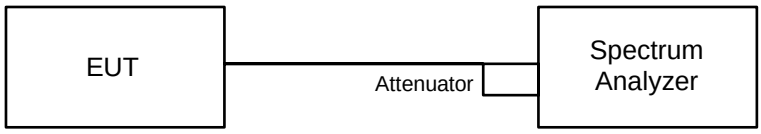
6.1.2 Test Procedure

Peak Power:
A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the power level.

Average Power:
Average power sensor was used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

6.2 Power Spectral Density

6.2.1 Test Setup

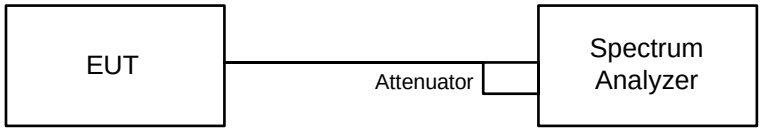


6.2.2 Test Procedure

a. Set analyzer center frequency to DTS channel center frequency.
b. Set the span to 1.5 times the DTS bandwidth.
c. Set the RBW to: 3 kHz.
d. Set the VBW ≥ 3 × RBW.
e. Detector = peak.
f. Sweep time = auto couple.
g. Trace mode = max hold.
h. Allow trace to fully stabilize.
i. Use the peak marker function to determine the maximum amplitude level within the RBW.

6.3 6 dB Bandwidth

6.3.1 Test Setup

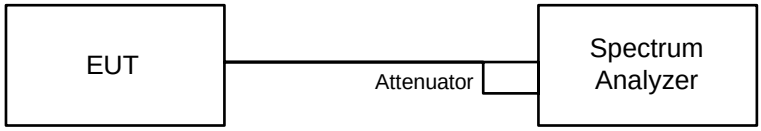


6.3.2 Test Procedure

a. Set resolution bandwidth (RBW) = 100 kHz.
b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = Peak.
c. Trace mode = max hold.
d. Sweep = auto couple.
e. Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.4 Conducted Out of Band Emissions

6.4.1 Test Setup



6.4.2 Test Procedure

MEASUREMENT PROCEDURE REF

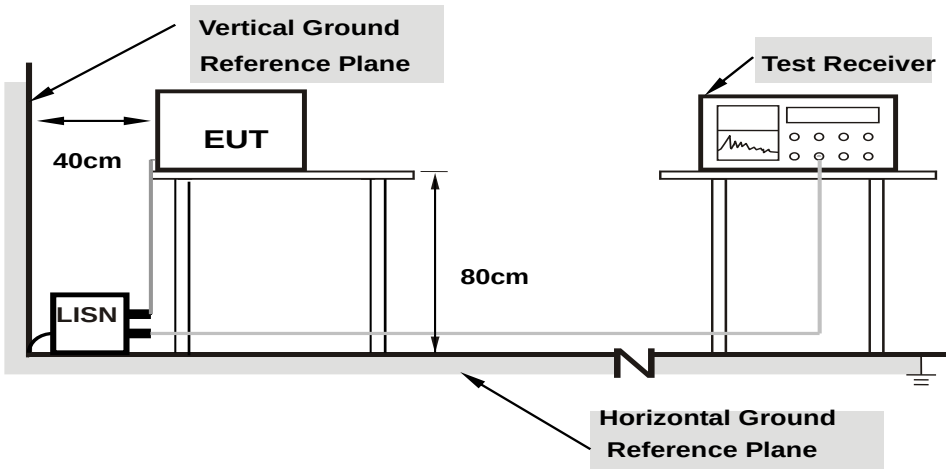
a. Set the RBW = 100 kHz.
b. Set the VBW ≥ 300 kHz.
c. Detector = peak.
d. Sweep time = auto couple.
e. Trace mode = max hold.
f. Allow trace to fully stabilize.
g. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOBE

a. Set RBW = 100 kHz.
b. Set VBW ≥ 300 kHz.
c. Detector = peak.
d. Sweep = auto couple.
e. Trace Mode = max hold.
f. Allow trace to fully stabilize.
g. Use the peak marker function to determine the maximum amplitude level.

6.5 AC Power Conducted Emissions

6.5.1 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).

6.5.2 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.

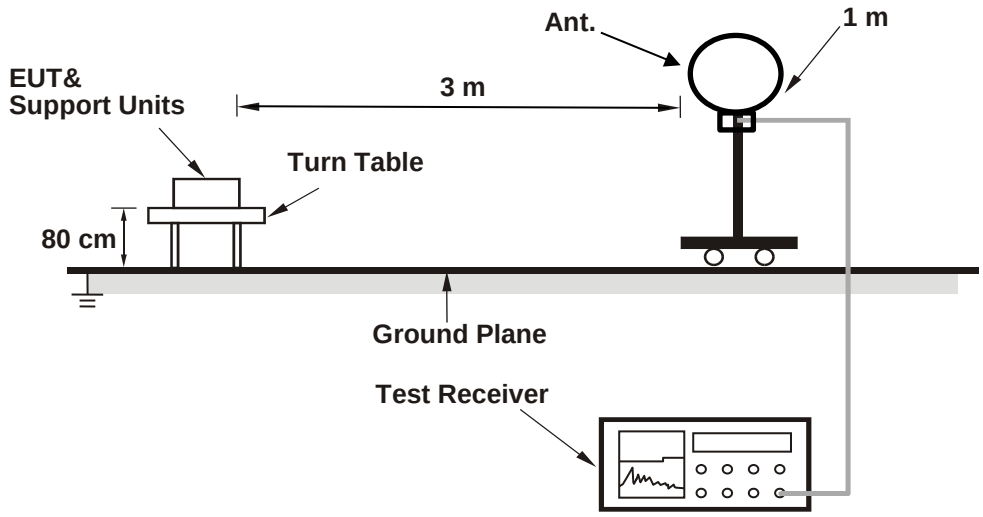
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

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.

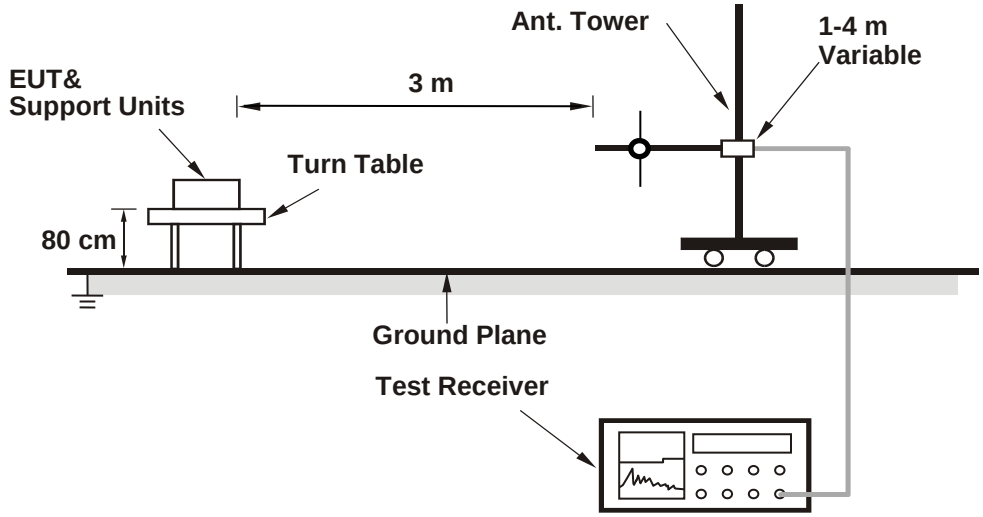
6.6 Unwanted Emissions below 1 GHz

6.6.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



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

6.6.2 Test Procedure

For Radiated emission below 30 MHz

a. 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.

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

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

d. 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. 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

a. 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.

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

c. 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.

d. 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.

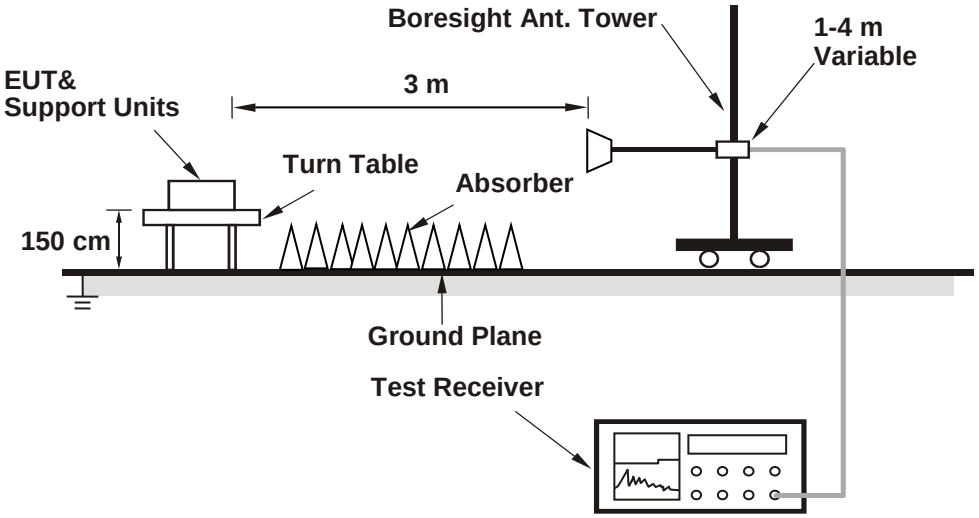
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

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.

6.7 Unwanted Emissions above 1 GHz

6.7.1 Test Setup



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

6.7.2 Test Procedure

a. 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.

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

c. 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.

d. 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. 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.

7 Test Results of Test Item

7.1 RF Output Power

Input Power:	3.3 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Louis Yang

For Peak Power

802.11b

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	22.41	21.33	310.012	24.91	30	Pass
6	2437	25.39	23.92	592.543	27.73	30	Pass
11	2462	23.53	22.11	387.979	25.89	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.5 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	23.96	23.68	482.232	26.83	30	Pass
6	2437	25.94	24.38	666.802	28.24	30	Pass
11	2462	24.23	23.77	503.082	27.02	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.5 dBi < 6 dBi, so the output power limit shall not be reduced.

VHT20

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	23.22	23.01	409.88	26.13	30	Pass
6	2437	25.68	24.09	626.277	27.97	30	Pass
11	2462	24.79	23.58	529.335	27.24	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.5 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	23.47	23.24	433.194	26.37	30	Pass
6	2437	25.92	24.32	661.237	28.20	30	Pass
11	2462	25.03	23.81	558.856	27.47	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.5 dBi < 6 dBi, so the output power limit shall not be reduced.

For Average Power

802.11b

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Average Power (mW)	Total Average Power (dBm)
		Chain 0	Chain 1		
1	2412	20.01	18.96	178.935	22.53
6	2437	23.77	22.38	411.214	26.14
11	2462	21.27	19.84	230.351	23.62

802.11g

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Average Power (mW)	Total Average Power (dBm)
		Chain 0	Chain 1		
1	2412	17.36	16.92	103.654	20.16
6	2437	21.96	20.81	277.54	24.43
11	2462	17.69	16.26	101.016	20.04

VHT20

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Average Power (mW)	Total Average Power (dBm)
		Chain 0	Chain 1		
1	2412	15.18	14.81	63.23	18.01
6	2437	20.93	19.61	215.291	23.33
11	2462	17.33	15.94	93.34	19.70

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Average Power (mW)	Total Average Power (dBm)
		Chain 0	Chain 1		
1	2412	15.41	15.13	67.337	18.28
6	2437	21.17	19.85	227.523	23.57
11	2462	17.58	16.18	98.775	19.95

7.2 Power Spectral Density

Input Power:	3.3 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Louis Yang

802.11b

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
1	2412	-3.14	0.84	2.30	8	Pass
6	2437	-0.04	2.23	4.25	8	Pass
11	2462	-1.83	0.97	2.80	8	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{Chain0/20} + 10^{Chain1/20})^2$ / 2]
3. The directional gain is 5.01 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
1	2412	-8.37	-5.36	-3.60	8	Pass
6	2437	-6.84	-2.05	-0.81	8	Pass
11	2462	-11.28	-6.11	-4.96	8	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{Chain0/20} + 10^{Chain1/20})^2$ / 2]
3. The directional gain is 5.01 dBi < 6 dBi, so the power density limit shall not be reduced.

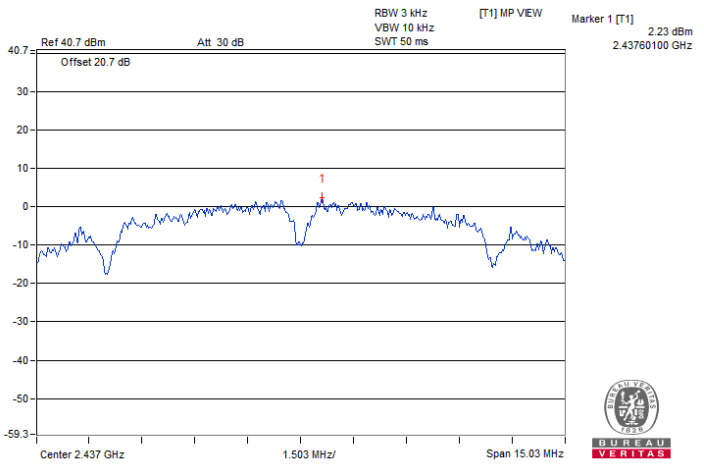
802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
1	2412	-13.45	-10.71	-8.86	8	Pass
6	2437	-6.85	-5.46	-3.09	8	Pass
11	2462	-11.74	-8.61	-6.89	8	Pass

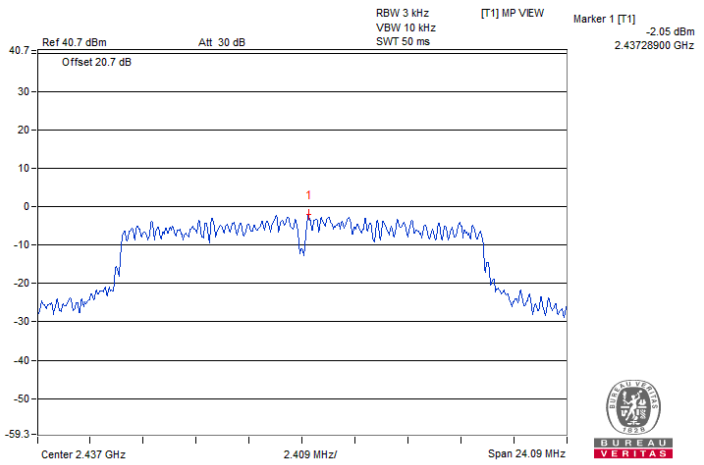
Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{Chain0/20} + 10^{Chain1/20})^2$ / 2]
3. The directional gain is 5.01 dBi < 6 dBi, so the power density limit shall not be reduced.

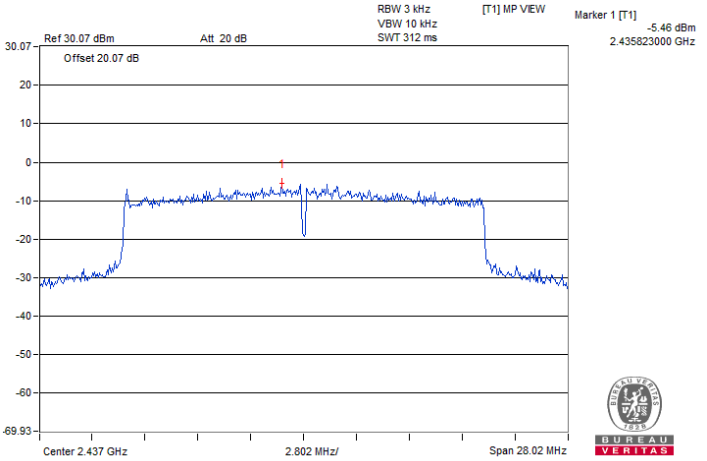
Spectrum Plot of Maximum Value



802.11b / Chain 1 : CH 6



802.11g / Chain 1 : CH 6



802.11ax (HE20) / Chain 1 : CH 6

7.3 6 dB Bandwidth

Input Power:	3.3 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Louis Yang

802.11b

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	8.09	8.09	0.5	Pass
6	2437	9.10	10.02	0.5	Pass
11	2462	8.09	8.08	0.5	Pass

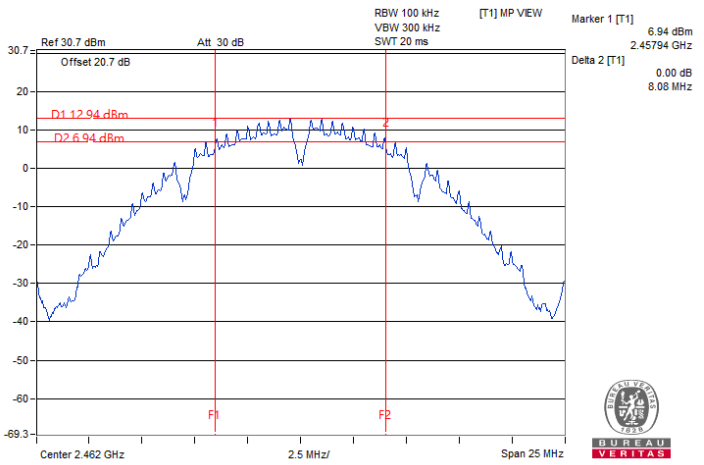
802.11g

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	15.14	15.16	0.5	Pass
6	2437	15.99	16.06	0.5	Pass
11	2462	15.81	16.32	0.5	Pass

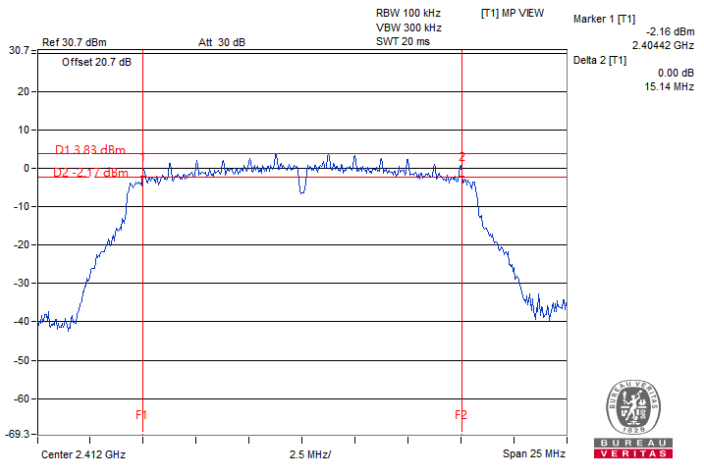
802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	18.35	18.36	0.5	Pass
6	2437	18.49	18.68	0.5	Pass
11	2462	18.49	18.86	0.5	Pass

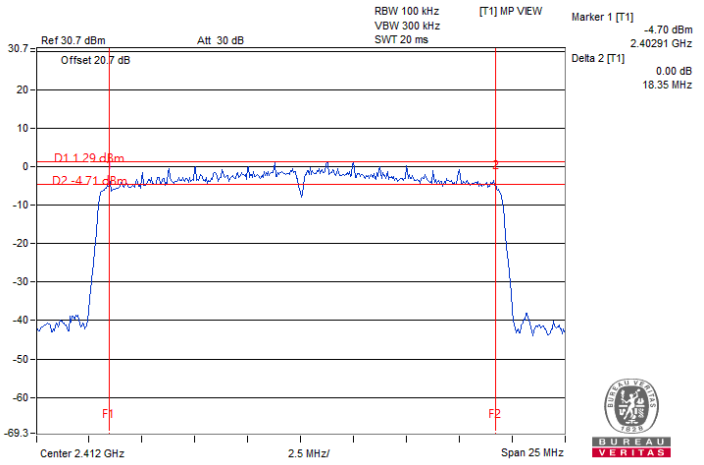
Spectrum Plot of Minimum Value



802.11b / Chain 1 : CH 11



802.11g / Chain 0 : CH 1

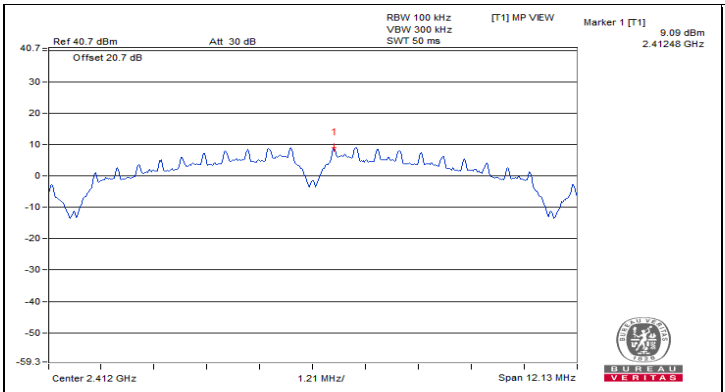


802.11ax (HE20) / Chain 0 : CH 1

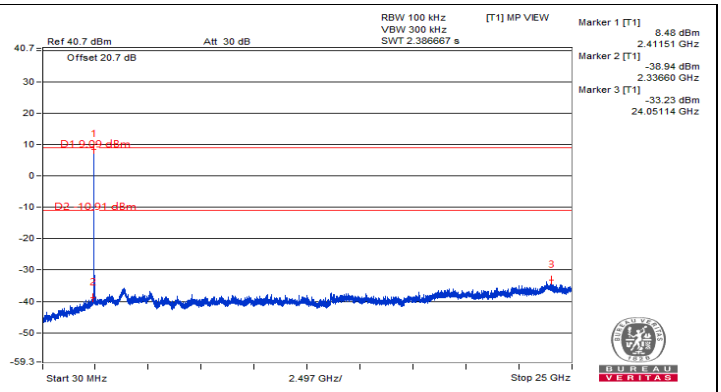
7.4 Conducted Out of Band Emissions

Input Power:	3.3 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Louis Yang

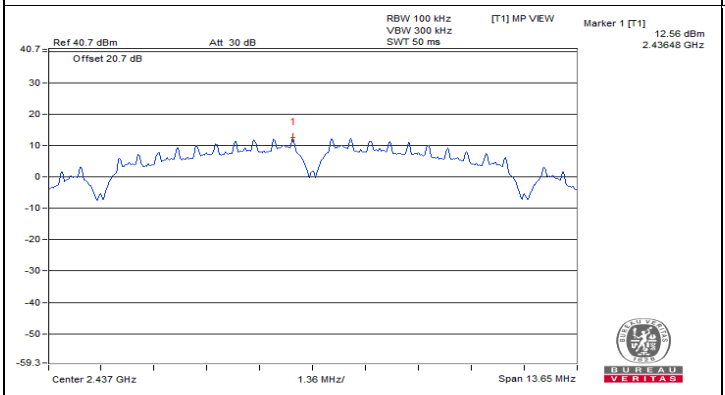
802.11b



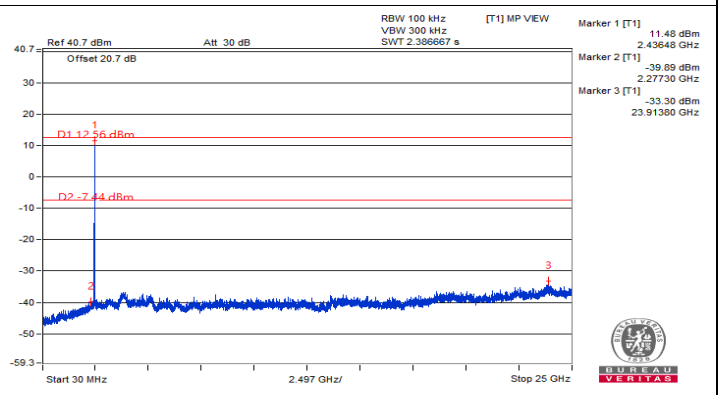
Chain 0 : CH 1



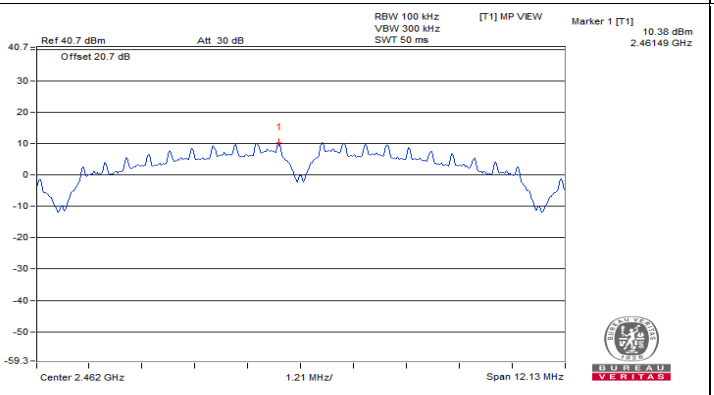
Chain 0 : CH 1



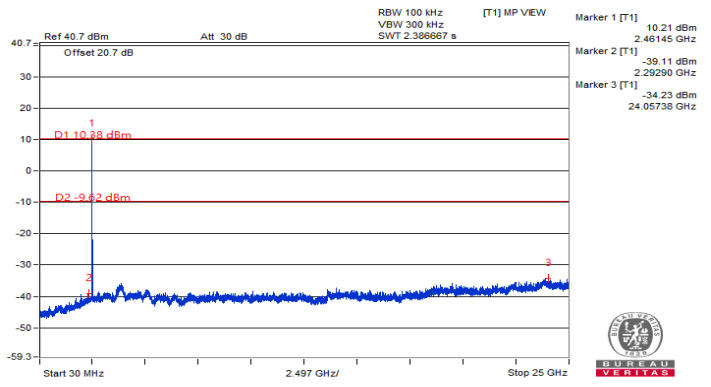
Chain 0 : CH 6



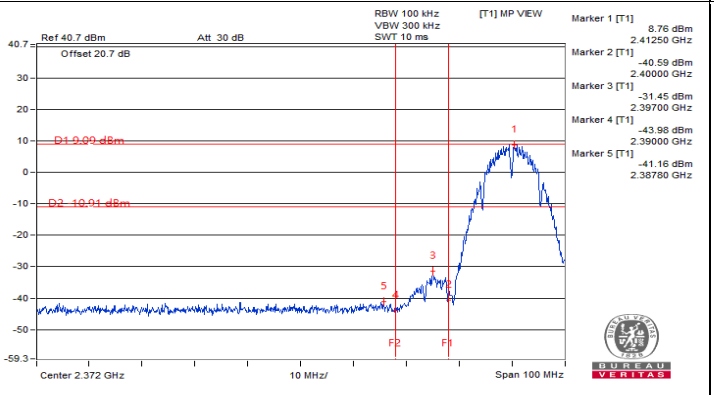
Chain 0 : CH 6



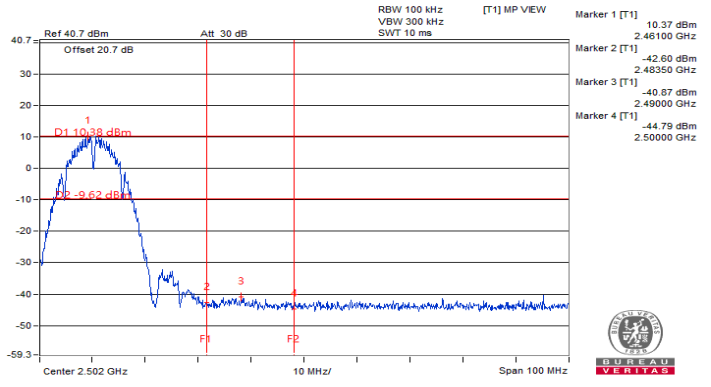
Chain 0 : CH 11



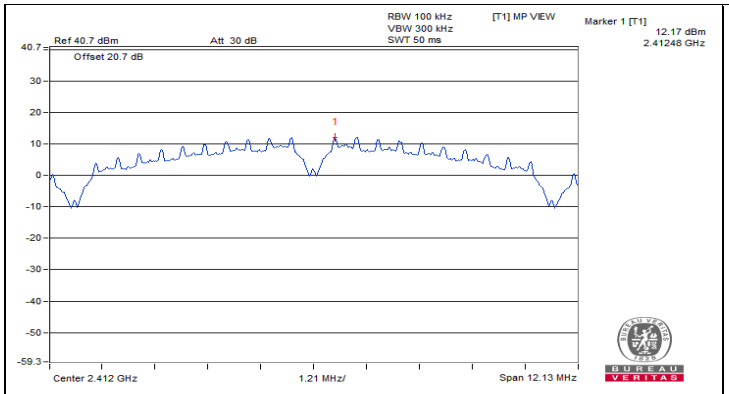
Chain 0 : CH 11



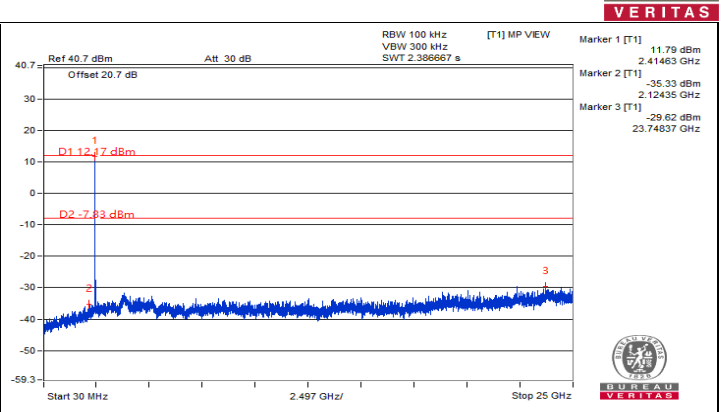
Chain 0 : CH 1 Band edge



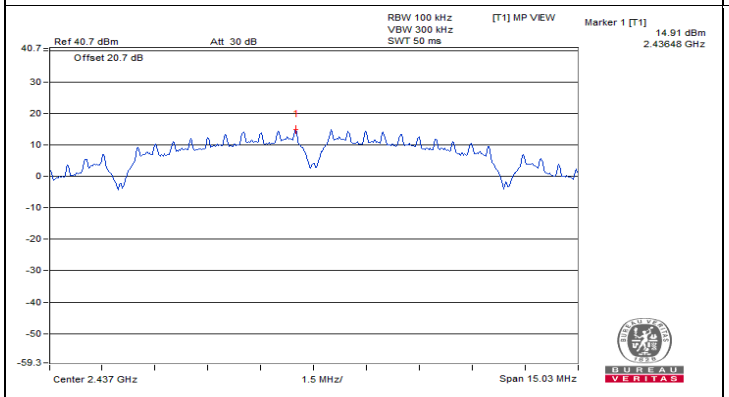
Chain 0 : CH 11 Band edge



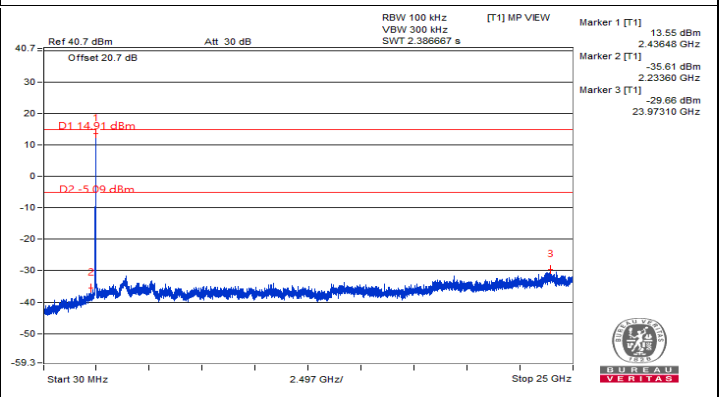
Chain 1 : CH 1



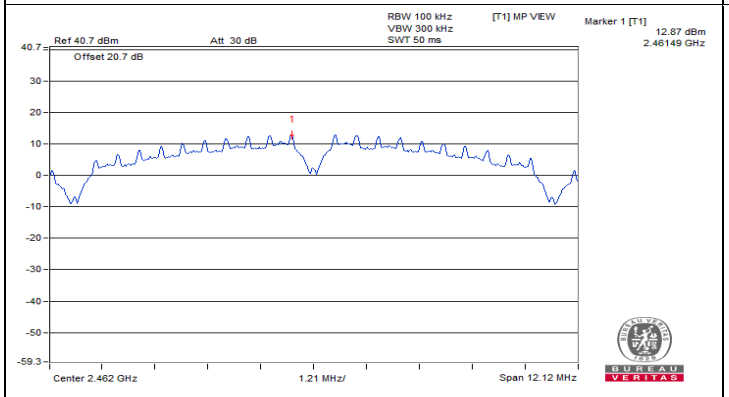
Chain 1 : CH 1



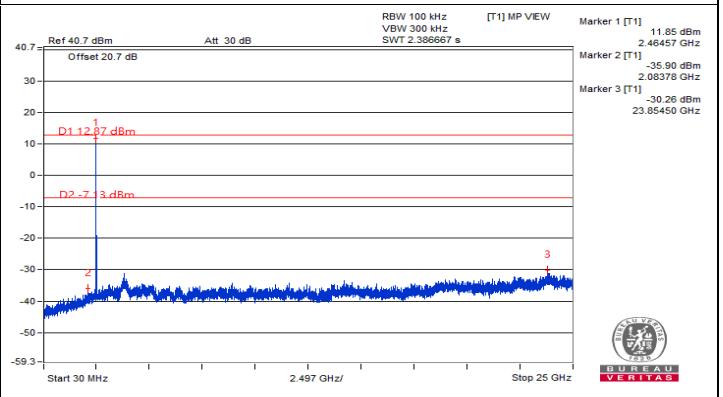
Chain 1 : CH 6



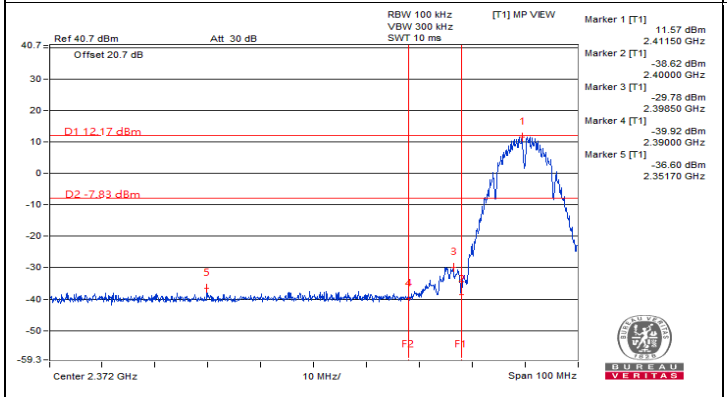
Chain 1 : CH 6



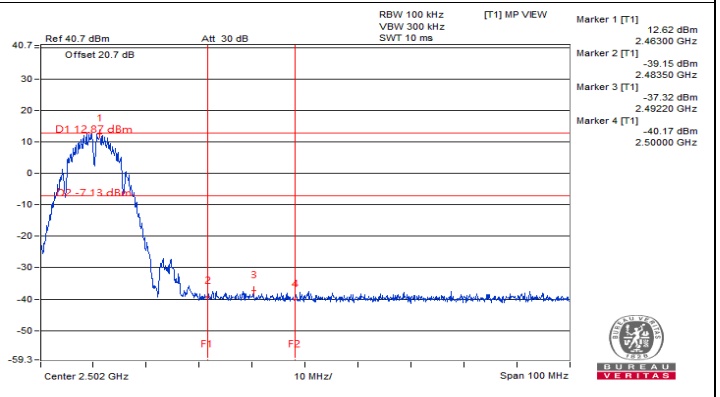
Chain 1 : CH 11



Chain 1 : CH 11

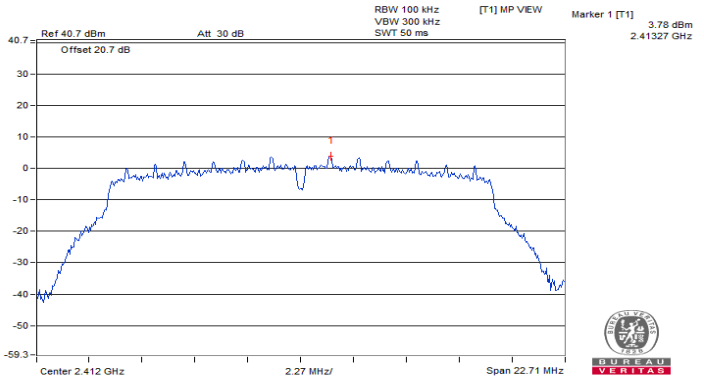


Chain 1 : CH 1 Band edge

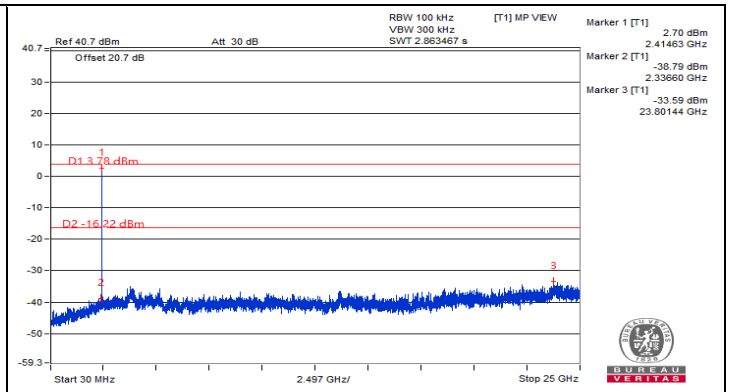


Chain 1 : CH 11 Band edge

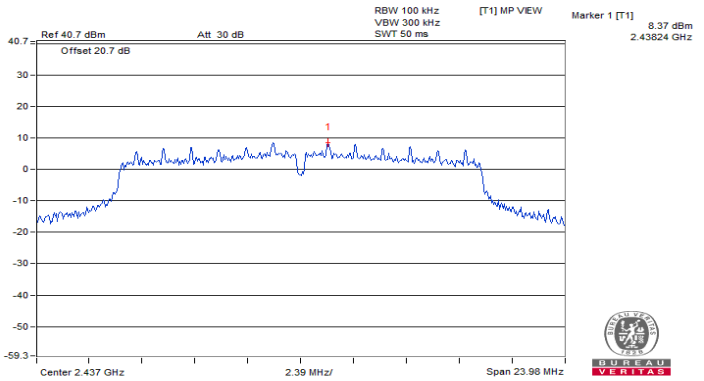
802.11g



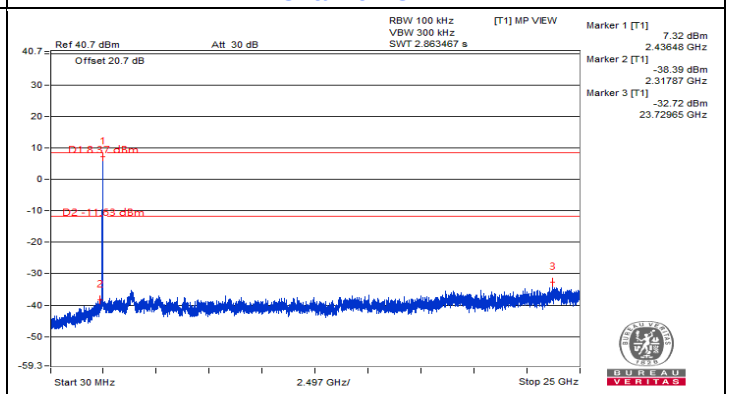
Chain 0 : CH 1



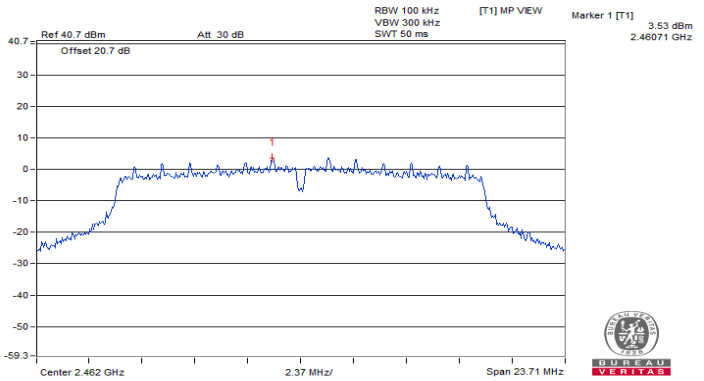
Chain 0 : CH 1



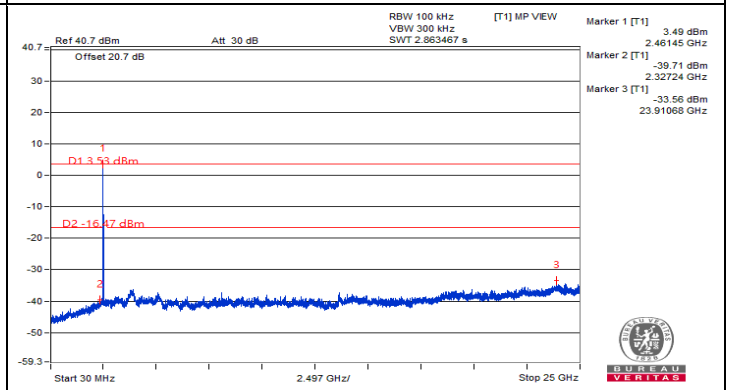
Chain 0 : CH 6



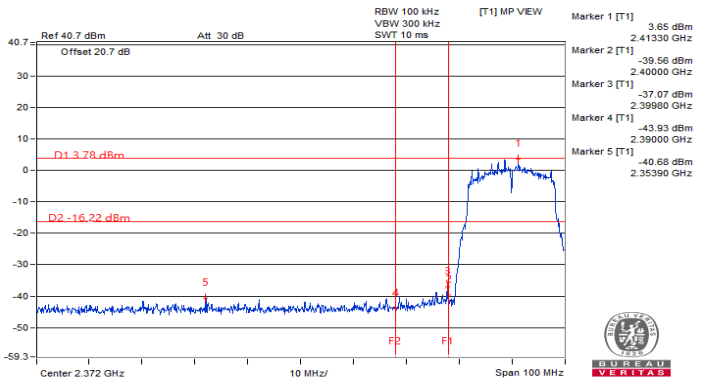
Chain 0 : CH 6



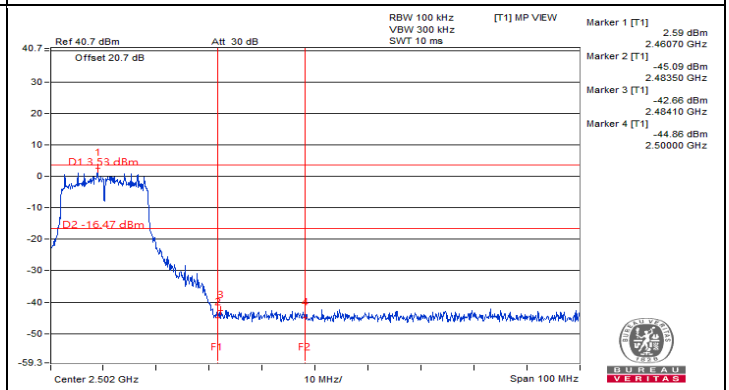
Chain 0 : CH 11



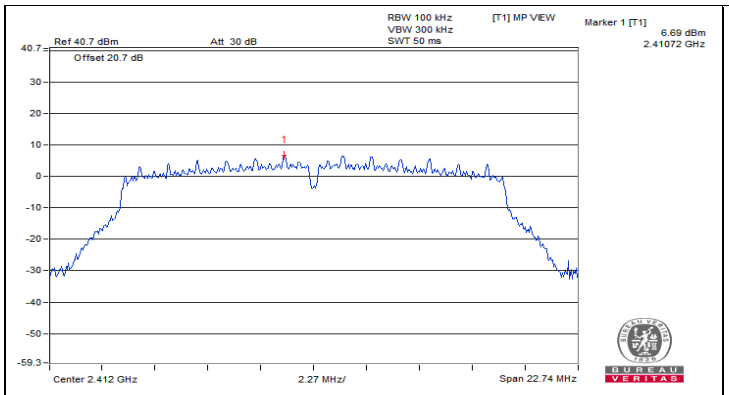
Chain 0 : CH 11



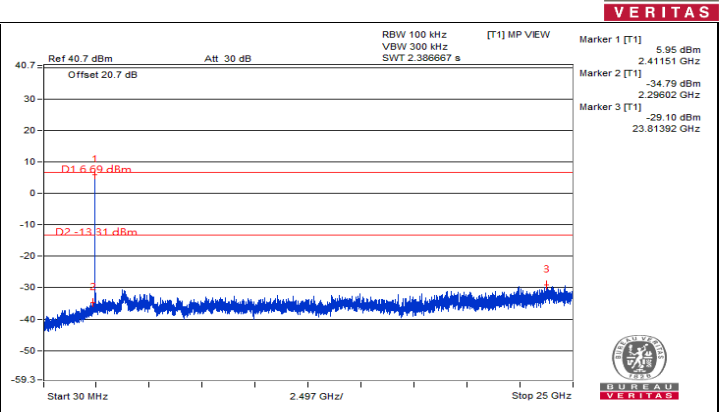
Chain 0 : CH 1 Band edge



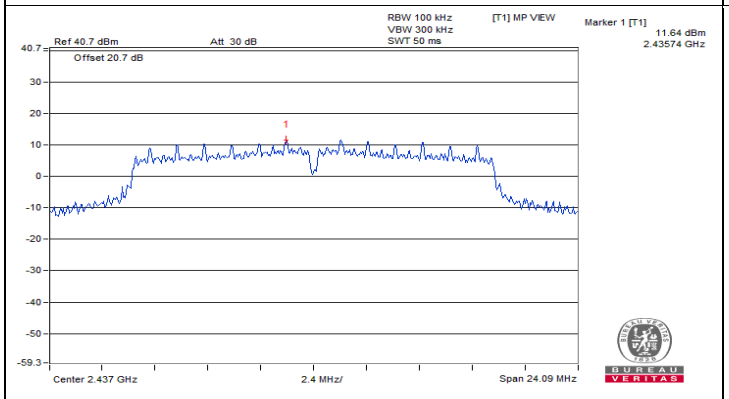
Chain 0 : CH 11 Band edge



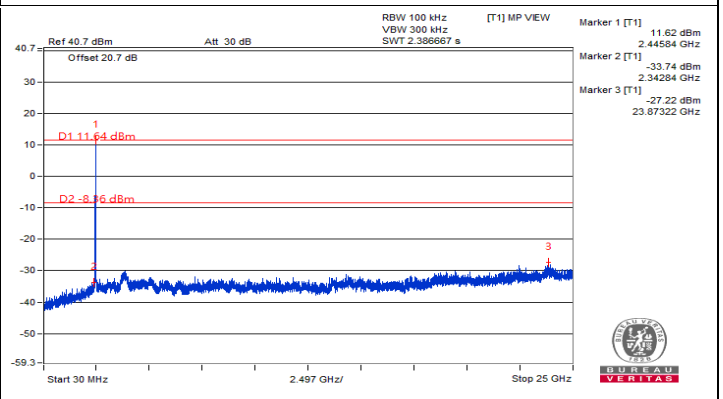
Chain 1 : CH 1



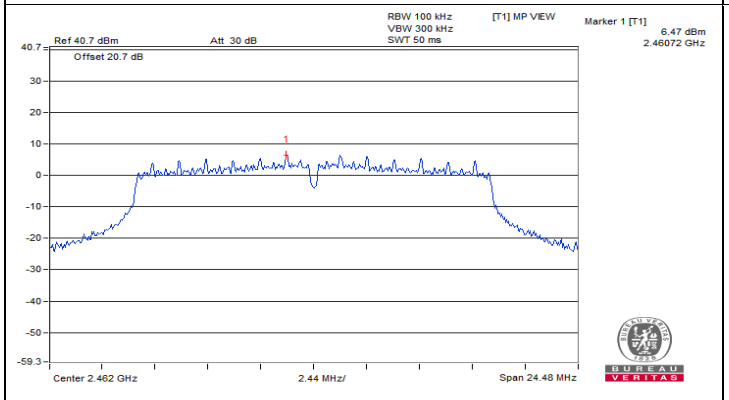
Chain 1 : CH 1



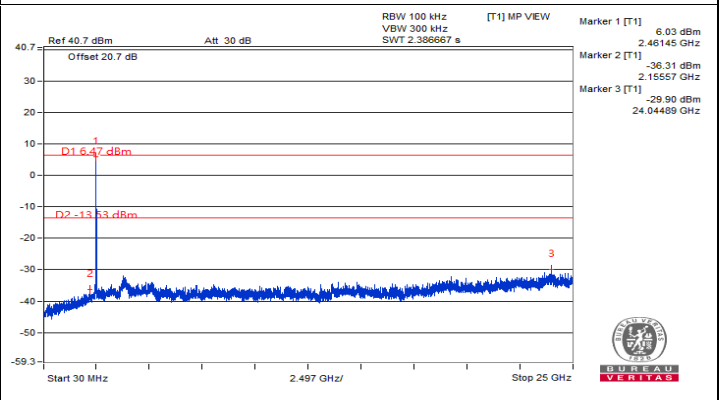
Chain 1 : CH 6



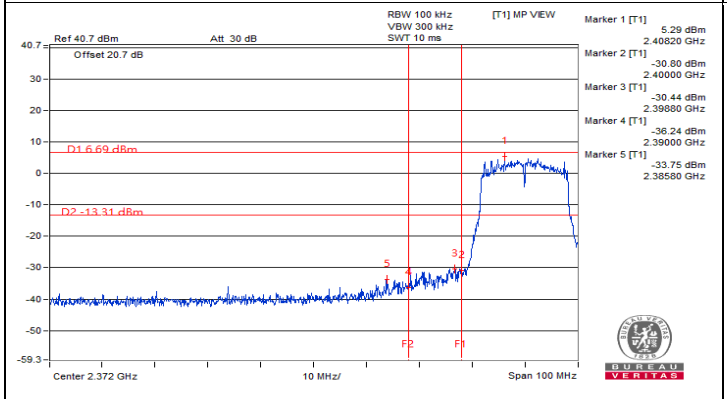
Chain 1 : CH 6



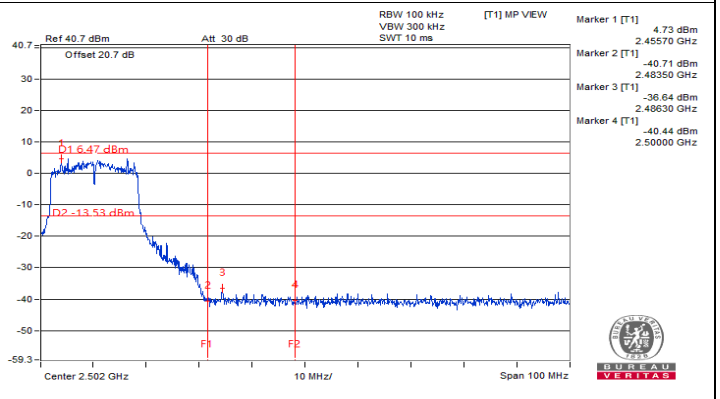
Chain 1 : CH 11



Chain 1 : CH 11

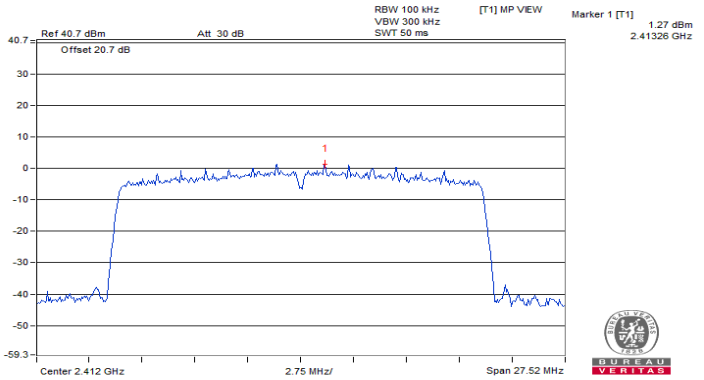


Chain 1 : CH 1 Band edge

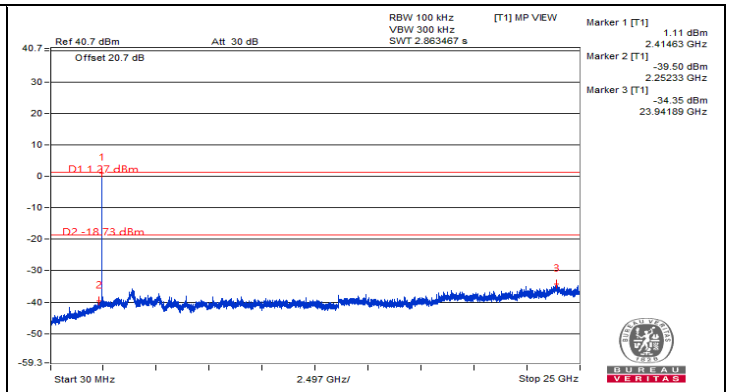


Chain 1 : CH 11 Band edge

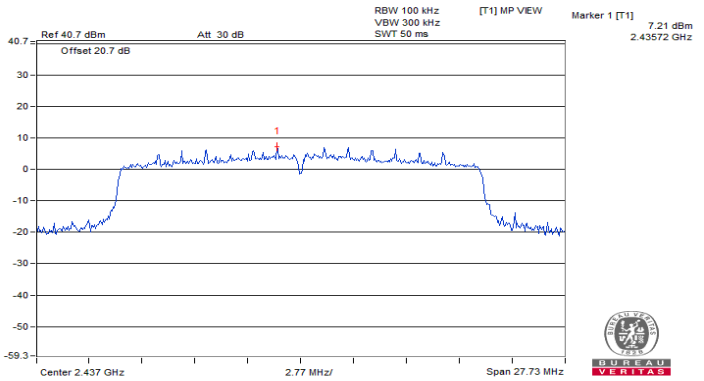
802.11ax (HE20)



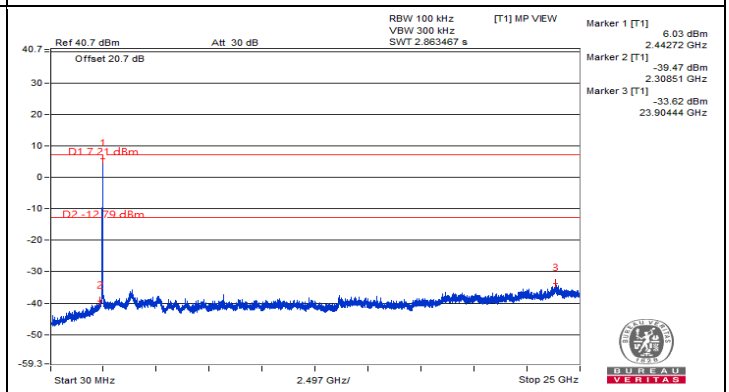
Chain 0 : CH 1



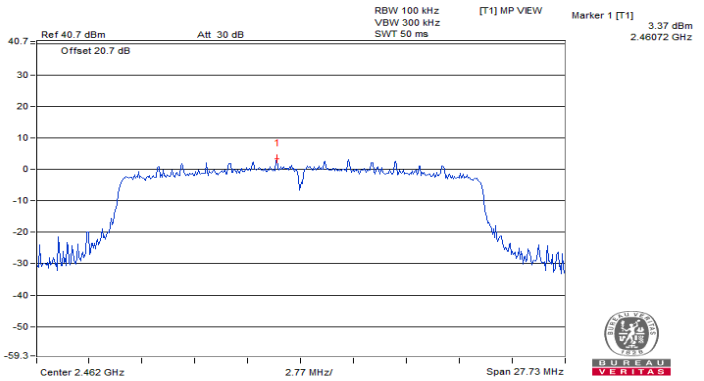
Chain 0 : CH 1



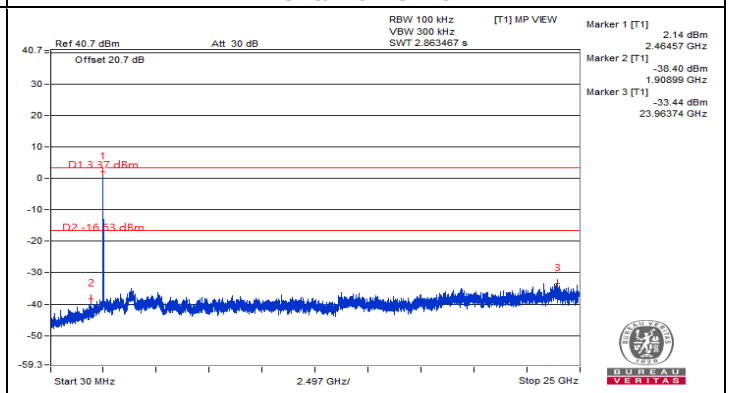
Chain 0 : CH 6



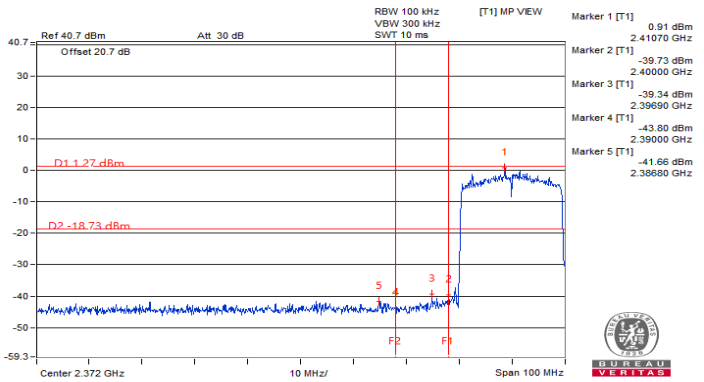
Chain 0 : CH 6



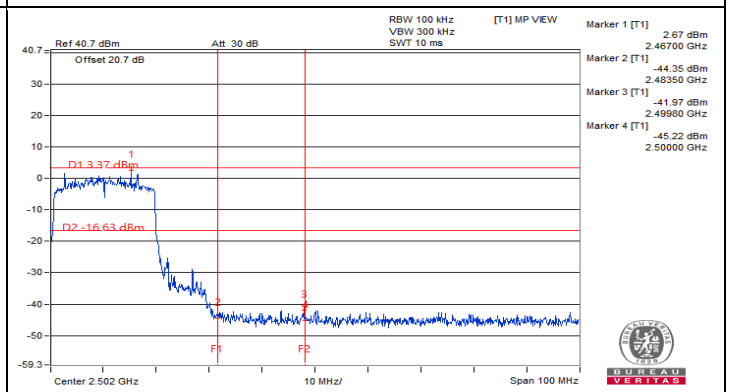
Chain 0 : CH 11



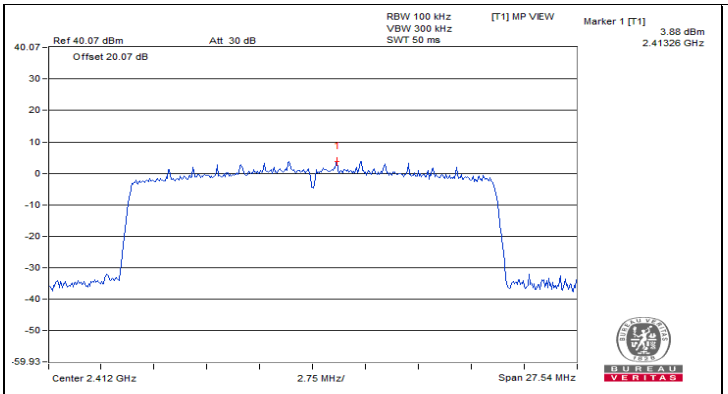
Chain 0 : CH 11



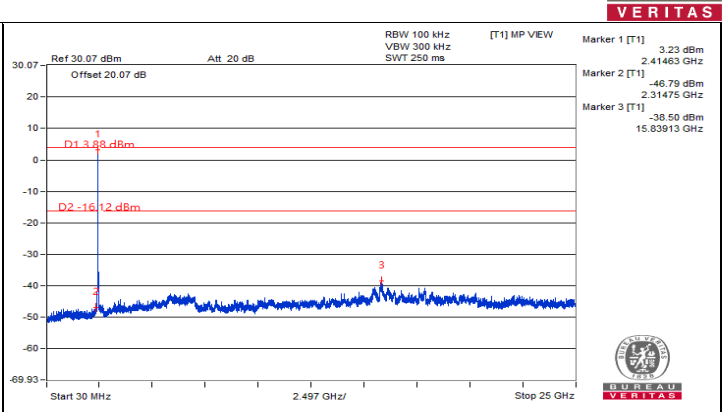
Chain 0 : CH 1 Band edge



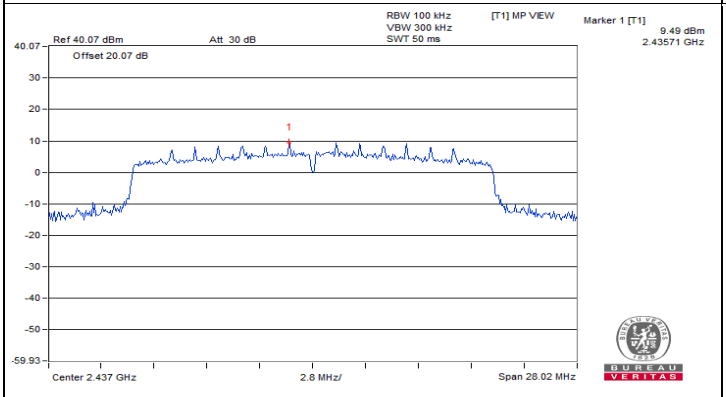
Chain 0 : CH 11 Band edge



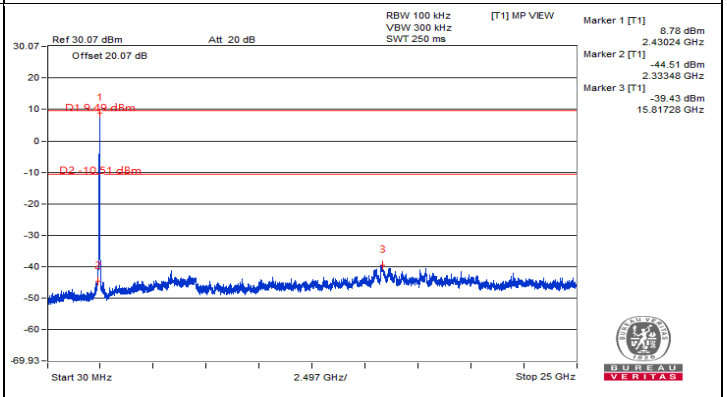
Chain 1 : CH 1



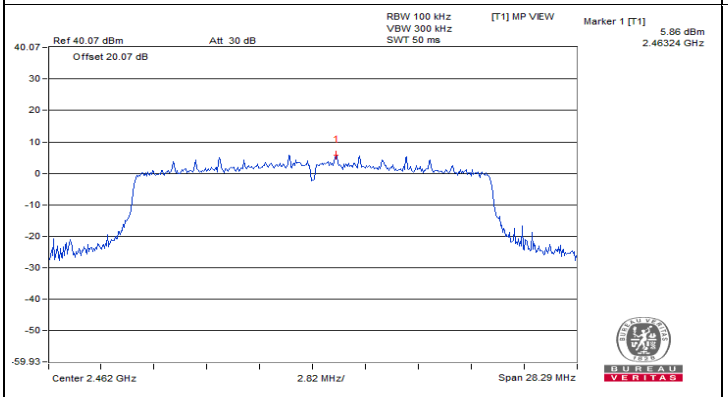
Chain 1 : CH 1



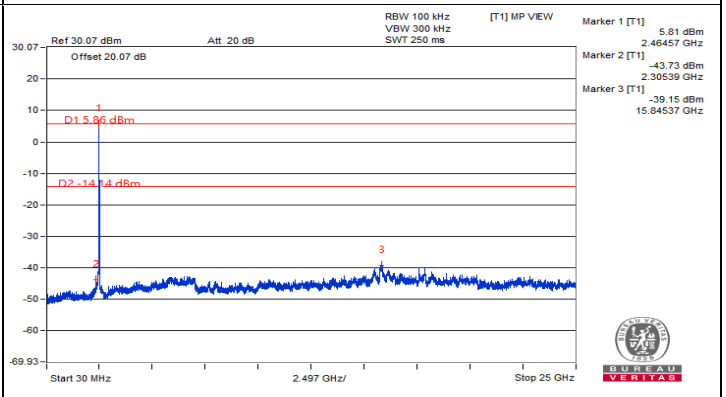
Chain 1 : CH 6



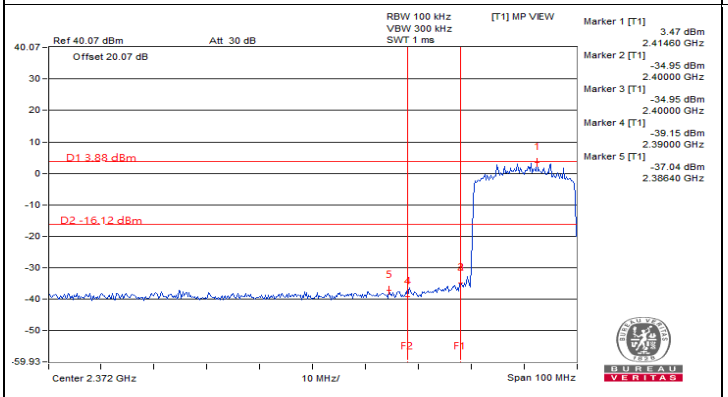
Chain 1 : CH 6



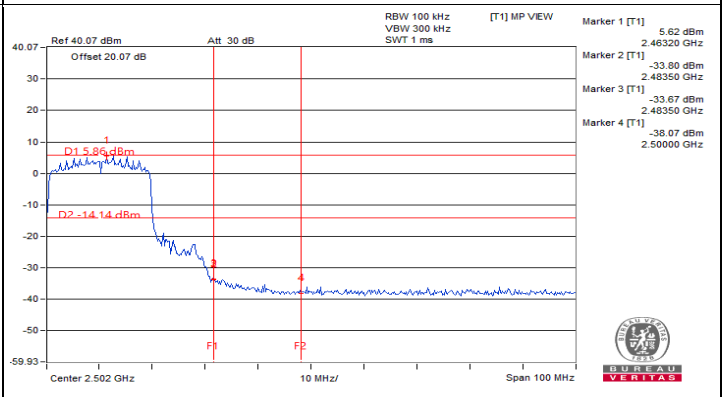
Chain 1 : CH 11



Chain 1 : CH 11



Chain 1 : CH 1 Band edge



Chain 1 : CH 11 Band edge

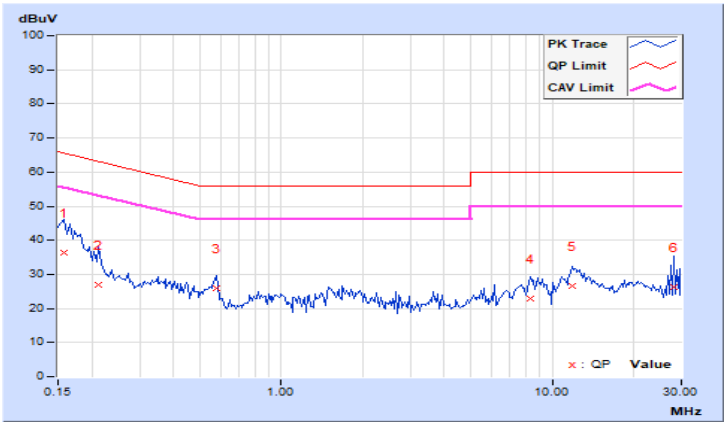
7.5 AC Power Conducted Emissions

RF Mode	802.11b	**Channel**	CH 6：2437 MHz
Frequency Range	150kHz ~ 30MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Ryan Du		

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	0.15781	9.97	26.33	3.28	36.30	13.25	65.58	55.58	-29.28	-42.33
2	0.21250	9.97	16.84	-4.14	26.81	5.83	63.11	53.11	-36.30	-47.28
3	0.57578	9.99	16.01	2.62	26.00	12.61	56.00	46.00	-30.00	-33.39
4	8.32031	10.40	12.49	-0.85	22.89	9.55	60.00	50.00	-37.11	-40.45
5	11.84766	10.58	16.16	1.83	26.74	12.41	60.00	50.00	-33.26	-37.59
6	28.31250	11.27	14.87	3.53	26.14	14.80	60.00	50.00	-33.86	-35.20

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

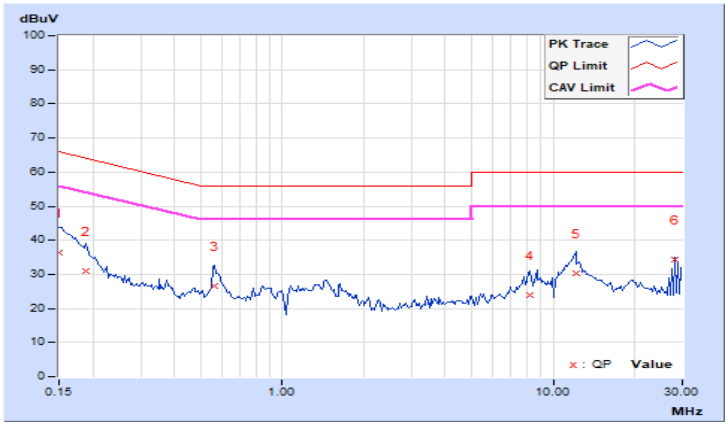


RF Mode	802.11b	**Channel**	CH 6：2437 MHz
Frequency Range	150kHz ~ 30MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Ryan Du		

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	0.15000	10.01	26.27	2.15	36.28	12.16	66.00	56.00	-29.72	-43.84
2	0.18906	10.02	21.03	-3.34	31.05	6.68	64.08	54.08	-33.03	-47.40
3	0.56016	10.04	16.59	2.19	26.63	12.23	56.00	46.00	-29.37	-33.77
4	8.21484	10.39	13.49	-0.36	23.88	10.03	60.00	50.00	-36.12	-39.97
5	12.16406	10.54	19.92	6.00	30.46	16.54	60.00	50.00	-29.54	-33.46
6	**28.26172**	**10.93**	**23.25**	**12.91**	**34.18**	**23.84**	**60.00**	**50.00**	**-25.82**	**-26.16**

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



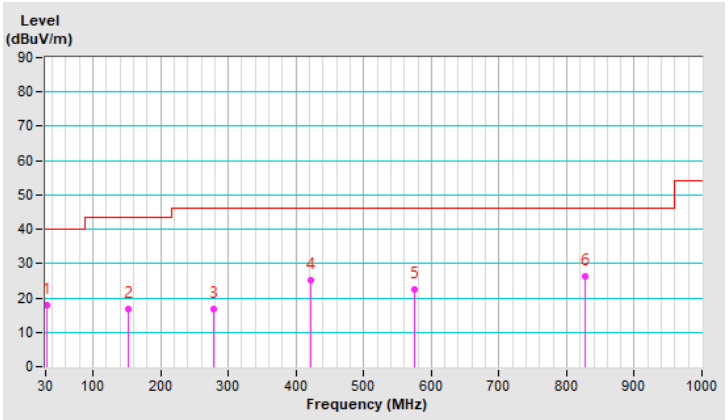
7.6 Unwanted Emissions below 1 GHz

RF Mode	802.11b	**Channel**	CH 6：2437 MHz
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	(QP) RB = 120kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Ryan Du		

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	32.41	17.9 QP	40.0	-22.1	1.50 H	188	31.9	-14.0
2	152.34	16.8 QP	43.5	-26.7	2.50 H	124	29.9	-13.1
3	278.65	16.9 QP	46.0	-29.1	1.50 H	72	30.0	-13.1
4	420.93	25.2 QP	46.0	-20.8	2.00 H	287	34.5	-9.3
5	575.19	22.5 QP	46.0	-23.5	1.50 H	269	28.9	-6.4
6	827.83	26.4 QP	46.0	-19.6	1.50 H	128	28.6	-2.2

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 emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

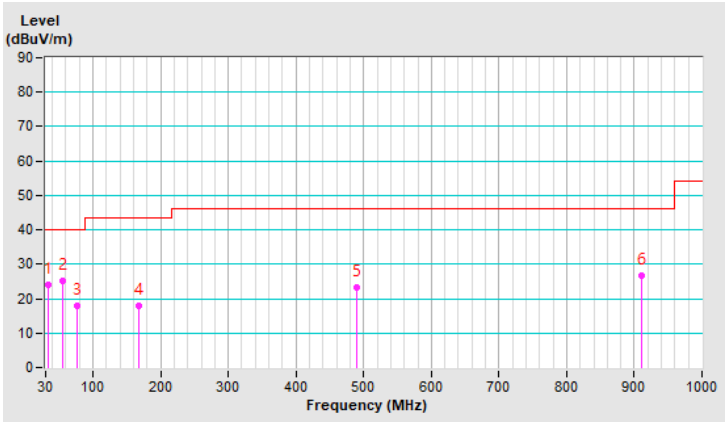


RF Mode	802.11b	**Channel**	CH 6：2437 MHz
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	(QP) RB = 120kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Ryan Du		

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	33.04	24.1 QP	40.0	-15.9	1.00 V	284	38.2	-14.1
2	**54.29**	**25.2 QP**	**40.0**	**-14.8**	**1.50 V**	**334**	**38.5**	**-13.3**
3	77.17	17.8 QP	40.0	-22.2	1.00 V	274	35.2	-17.4
4	168.62	17.8 QP	43.5	-25.7	1.50 V	346	31.3	-13.5
5	490.28	23.1 QP	46.0	-22.9	1.00 V	187	31.0	-7.9
6	910.13	26.8 QP	46.0	-19.2	1.50 V	44	27.7	-0.9

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 emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



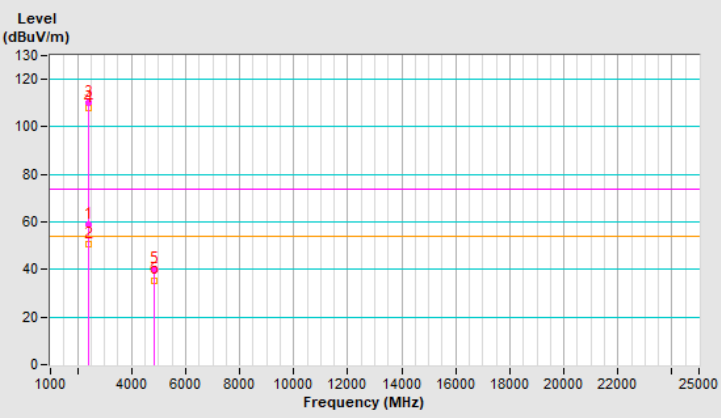
7.7 Unwanted Emissions above 1 GHz

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 (AV) RB = 1 MHz, VB = 100 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Ryan Du		

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	2387.17	59.1 PK	74.0	-14.9	2.37 H	51	59.2	-0.1
2	2387.17	50.8 AV	54.0	-3.2	2.37 H	51	50.9	-0.1
3	*2412.00	109.9 PK			2.37 H	51	110.0	-0.1
4	*2412.00	107.7 AV			2.37 H	51	107.8	-0.1
5	4824.00	40.1 PK	74.0	-33.9	1.31 H	13	35.6	4.5
6	4824.00	35.5 AV	54.0	-18.5	1.31 H	13	31.0	4.5

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

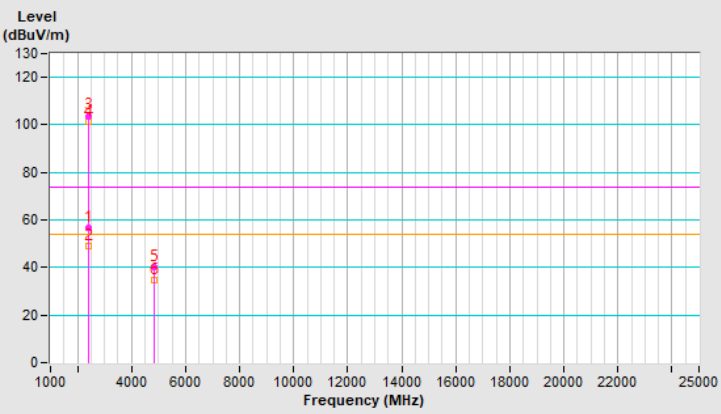


RF Mode	802.11b	**Channel**	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 100 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Ryan Du		

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	2387.52	56.7 PK	74.0	-17.3	3.66 V	272	56.8	-0.1
2	2387.52	48.9 AV	54.0	-5.1	3.66 V	272	49.0	-0.1
3	*2412.00	103.8 PK			3.66 V	272	103.9	-0.1
4	*2412.00	101.4 AV			3.66 V	272	101.5	-0.1
5	4824.00	40.4 PK	74.0	-33.6	3.11 V	242	35.9	4.5
6	4824.00	34.9 AV	54.0	-19.1	3.11 V	242	30.4	4.5

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

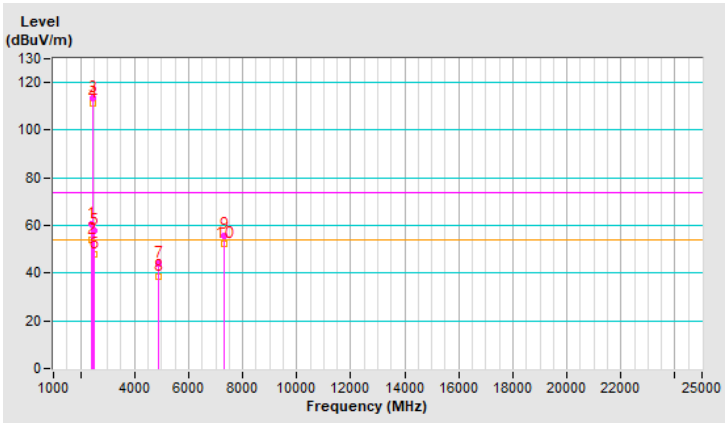


RF Mode	802.11b	**Channel**	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 100 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Ryan Du		

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	2390.00	60.4 PK	74.0	-13.6	1.77 H	55	60.5	-0.1
2	**2390.00**	**53.9 AV**	**54.0**	**-0.1**	**1.77 H**	**55**	**54.0**	**-0.1**
3	*2437.00	113.4 PK			1.77 H	55	113.5	-0.1
4	*2437.00	111.3 AV			1.77 H	55	111.4	-0.1
5	2483.50	57.6 PK	74.0	-16.4	1.77 H	55	57.8	-0.2
6	2483.50	47.7 AV	54.0	-6.3	1.77 H	55	47.9	-0.2
7	4874.00	43.8 PK	74.0	-30.2	1.38 H	16	39.2	4.6
8	4874.00	38.7 AV	54.0	-15.3	1.38 H	16	34.1	4.6
9	7311.00	55.9 PK	74.0	-18.1	1.58 H	48	44.3	11.6
10	7311.00	52.4 AV	54.0	-1.6	1.58 H	48	40.8	11.6

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

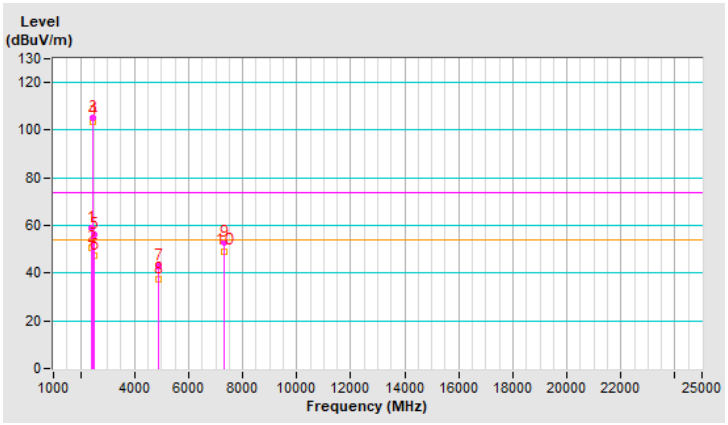


RF Mode	802.11b	**Channel**	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 100 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Ryan Du		

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	2390.00	58.8 PK	74.0	-15.2	3.69 V	258	58.9	-0.1
2	2390.00	50.6 AV	54.0	-3.4	3.69 V	258	50.7	-0.1
3	*2437.00	105.3 PK			3.69 V	258	105.4	-0.1
4	*2437.00	103.8 AV			3.69 V	258	103.9	-0.1
5	2483.50	56.2 PK	74.0	-17.8	3.69 V	258	56.4	-0.2
6	2483.50	47.2 AV	54.0	-6.8	3.69 V	258	47.4	-0.2
7	4874.00	42.9 PK	74.0	-31.1	3.12 V	256	38.3	4.6
8	4874.00	37.2 AV	54.0	-16.8	3.12 V	256	32.6	4.6
9	7311.00	53.1 PK	74.0	-20.9	3.95 V	237	41.5	11.6
10	7311.00	49.3 AV	54.0	-4.7	3.95 V	237	37.7	11.6

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

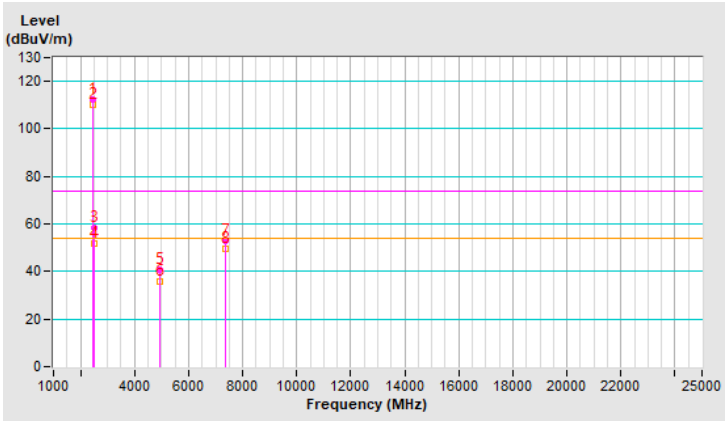


RF Mode	802.11b	Channel	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 100 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Ryan Du		

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	*2462.00	112.5 PK			1.96 H	144	112.5	0.0
2	*2462.00	110.3 AV			1.96 H	144	110.3	0.0
3	2483.50	58.4 PK	74.0	-15.6	1.96 H	144	58.6	-0.2
4	2483.50	51.6 AV	54.0	-2.4	1.96 H	144	51.8	-0.2
5	4924.00	40.5 PK	74.0	-33.5	1.34 H	24	35.8	4.7
6	4924.00	35.6 AV	54.0	-18.4	1.34 H	24	30.9	4.7
7	7386.00	52.7 PK	74.0	-21.3	1.59 H	54	41.1	11.6
8	7386.00	49.5 AV	54.0	-4.5	1.59 H	54	37.9	11.6

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

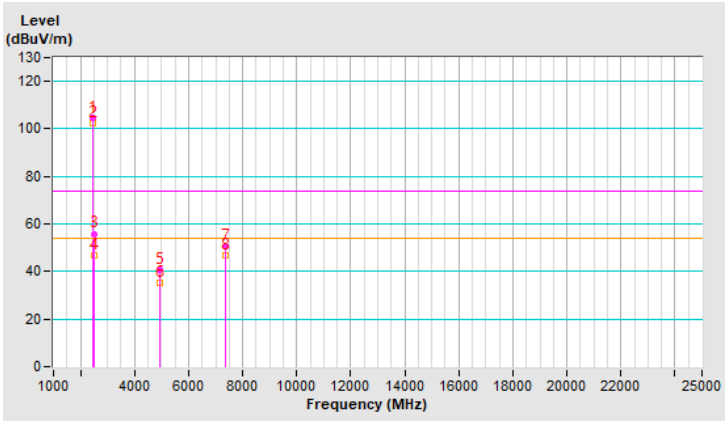


RF Mode	802.11b	Channel	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 100 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Ryan Du		

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	*2462.00	104.7 PK			3.95 V	113	104.7	0.0
2	*2462.00	102.5 AV			3.95 V	113	102.5	0.0
3	2483.50	55.9 PK	74.0	-18.1	3.95 V	113	56.1	-0.2
4	2483.50	46.8 AV	54.0	-7.2	3.95 V	113	47.0	-0.2
5	4924.00	40.9 PK	74.0	-33.1	3.08 V	248	36.2	4.7
6	4924.00	35.2 AV	54.0	-18.8	3.08 V	248	30.5	4.7
7	7386.00	50.6 PK	74.0	-23.4	4.00 V	231	39.0	11.6
8	7386.00	46.8 AV	54.0	-7.2	4.00 V	231	35.2	11.6

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

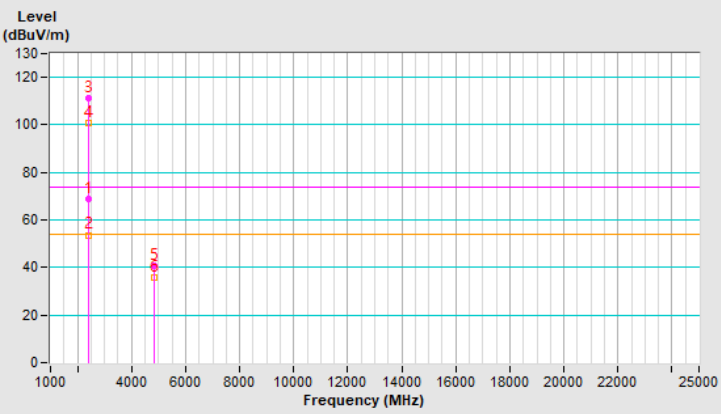


RF Mode	802.11g	**Channel**	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Ryan Du		

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	2389.76	68.9 PK	74.0	-5.1	2.38 H	37	69.0	-0.1
2	2389.76	53.7 AV	54.0	-0.3	2.38 H	37	53.8	-0.1
3	*2412.00	111.0 PK			2.38 H	37	111.1	-0.1
4	*2412.00	100.7 AV			2.38 H	37	100.8	-0.1
5	4824.00	40.6 PK	74.0	-33.4	1.39 H	24	36.1	4.5
6	4824.00	35.8 AV	54.0	-18.2	1.39 H	24	31.3	4.5

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

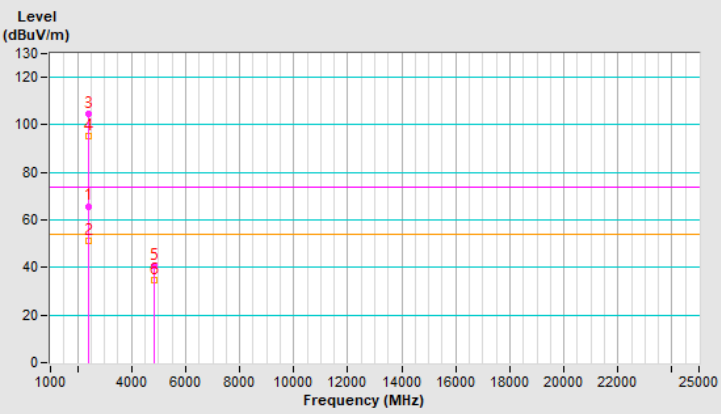


RF Mode	802.11g	**Channel**	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Ryan Du		

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	2389.76	65.8 PK	74.0	-8.2	3.66 V	268	65.9	-0.1
2	2389.76	51.4 AV	54.0	-2.6	3.66 V	268	51.5	-0.1
3	*2412.00	104.8 PK			3.66 V	268	104.9	-0.1
4	*2412.00	95.5 AV			3.66 V	268	95.6	-0.1
5	4824.00	40.7 PK	74.0	-33.3	3.07 V	233	36.2	4.5
6	4824.00	34.9 AV	54.0	-19.1	3.07 V	233	30.4	4.5

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

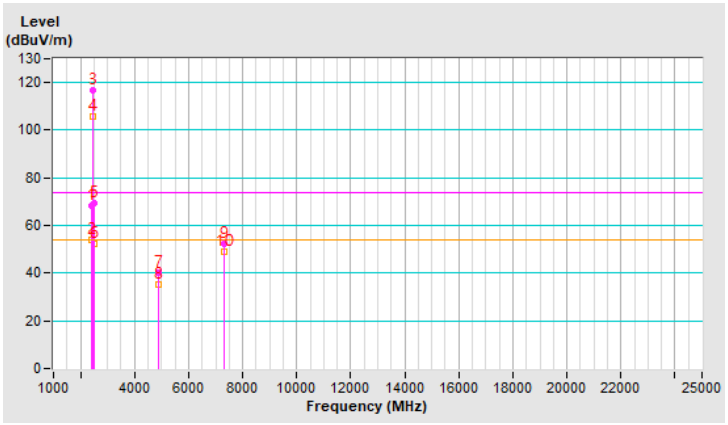


RF Mode	802.11g	Channel	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Ryan Du		

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	2390.00	68.3 PK	74.0	-5.7	1.92 H	142	68.4	-0.1
2	**2390.00**	**53.9 AV**	**54.0**	**-0.1**	**1.92 H**	**142**	**54.0**	**-0.1**
3	*2437.00	116.7 PK			1.92 H	142	116.8	-0.1
4	*2437.00	105.8 AV			1.92 H	142	105.9	-0.1
5	2483.50	69.2 PK	74.0	-4.8	1.92 H	142	69.4	-0.2
6	2483.50	52.2 AV	54.0	-1.8	1.92 H	142	52.4	-0.2
7	4874.00	40.1 PK	74.0	-33.9	1.40 H	21	35.5	4.6
8	4874.00	35.4 AV	54.0	-18.6	1.40 H	21	30.8	4.6
9	7311.00	52.3 PK	74.0	-21.7	1.65 H	50	40.7	11.6
10	7311.00	49.0 AV	54.0	-5.0	1.65 H	50	37.4	11.6

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

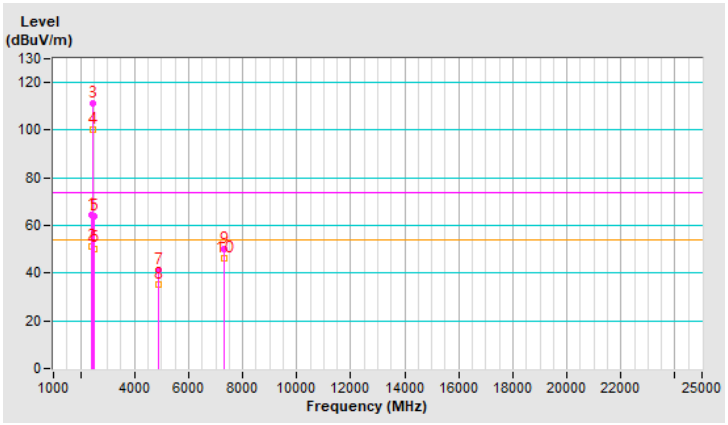


RF Mode	802.11g	**Channel**	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Ryan Du		

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	2390.00	64.5 PK	74.0	-9.5	3.65 V	279	64.6	-0.1
2	2390.00	51.2 AV	54.0	-2.8	3.65 V	279	51.3	-0.1
3	*2437.00	111.3 PK			3.65 V	279	111.4	-0.1
4	*2437.00	100.4 AV			3.65 V	279	100.5	-0.1
5	2483.50	63.7 PK	74.0	-10.3	3.65 V	279	63.9	-0.2
6	2483.50	50.4 AV	54.0	-3.6	3.65 V	279	50.6	-0.2
7	4874.00	41.1 PK	74.0	-32.9	3.04 V	232	36.5	4.6
8	4874.00	35.3 AV	54.0	-18.7	3.04 V	232	30.7	4.6
9	7311.00	50.0 PK	74.0	-24.0	3.99 V	247	38.4	11.6
10	7311.00	46.4 AV	54.0	-7.6	3.99 V	247	34.8	11.6

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

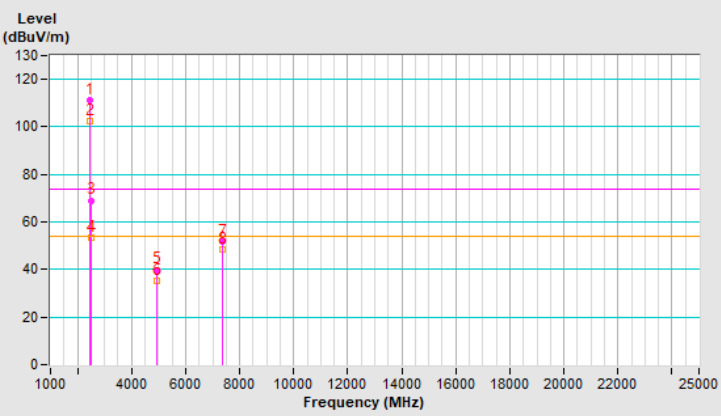


RF Mode	802.11g	**Channel**	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Ryan Du		

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	*2462.00	111.4 PK			2.42 H	124	111.4	0.0
2	*2462.00	102.2 AV			2.42 H	124	102.2	0.0
3	2483.50	69.1 PK	74.0	-4.9	2.42 H	124	69.3	-0.2
4	2483.50	53.2 AV	54.0	-0.8	2.42 H	124	53.4	-0.2
5	4924.00	39.9 PK	74.0	-34.1	1.33 H	16	35.2	4.7
6	4924.00	35.4 AV	54.0	-18.6	1.33 H	16	30.7	4.7
7	7386.00	52.0 PK	74.0	-22.0	1.55 H	43	40.4	11.6
8	7386.00	48.7 AV	54.0	-5.3	1.55 H	43	37.1	11.6

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

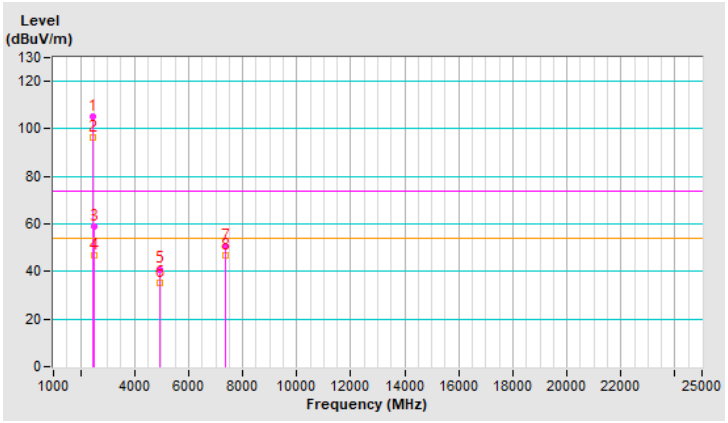


RF Mode	802.11g	**Channel**	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Ryan Du		

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	*2462.00	105.4 PK			4.00 V	96	105.4	0.0
2	*2462.00	96.2 AV			4.00 V	96	96.2	0.0
3	2483.50	58.8 PK	74.0	-15.2	4.00 V	96	59.0	-0.2
4	2483.50	46.6 AV	54.0	-7.4	4.00 V	96	46.8	-0.2
5	4924.00	41.0 PK	74.0	-33.0	3.05 V	240	36.3	4.7
6	4924.00	35.2 AV	54.0	-18.8	3.05 V	240	30.5	4.7
7	7386.00	50.5 PK	74.0	-23.5	4.00 V	240	38.9	11.6
8	7386.00	46.9 AV	54.0	-7.1	4.00 V	240	35.3	11.6

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

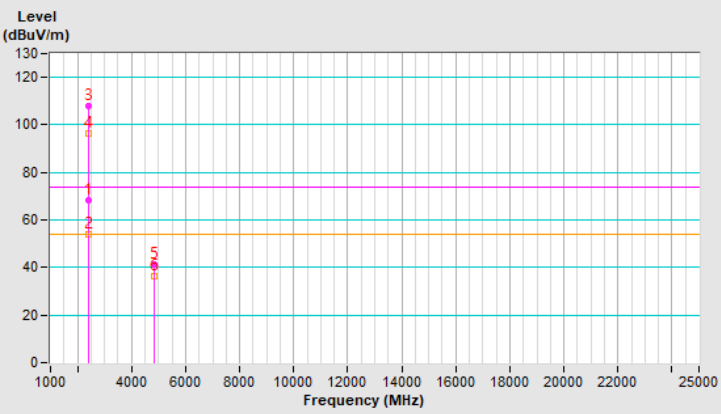


RF Mode	802.11ax (HE20)	**Channel**	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 300 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Ryan Du		

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	2390.00	68.1 PK	74.0	-5.9	2.38 H	34	68.2	-0.1
2	**2390.00**	**53.9 AV**	**54.0**	**-0.1**	**2.38 H**	**34**	**54.0**	**-0.1**
3	*2412.00	108.1 PK			2.38 H	34	108.2	-0.1
4	*2412.00	96.2 AV			2.38 H	34	96.3	-0.1
5	4824.00	41.1 PK	74.0	-32.9	1.37 H	10	36.6	4.5
6	4824.00	36.2 AV	54.0	-17.8	1.37 H	10	31.7	4.5

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

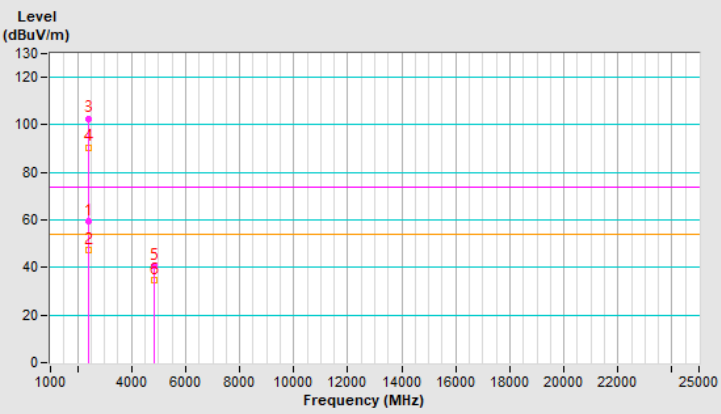


RF Mode	802.11ax (HE20)	**Channel**	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 300 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Ryan Du		

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	2390.00	59.4 PK	74.0	-14.6	3.66 V	267	59.5	-0.1
2	2390.00	47.6 AV	54.0	-6.4	3.66 V	267	47.7	-0.1
3	*2412.00	102.7 PK			3.66 V	267	102.8	-0.1
4	*2412.00	90.6 AV			3.66 V	267	90.7	-0.1
5	4824.00	40.7 PK	74.0	-33.3	3.12 V	262	36.2	4.5
6	4824.00	34.9 AV	54.0	-19.1	3.12 V	262	30.4	4.5

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

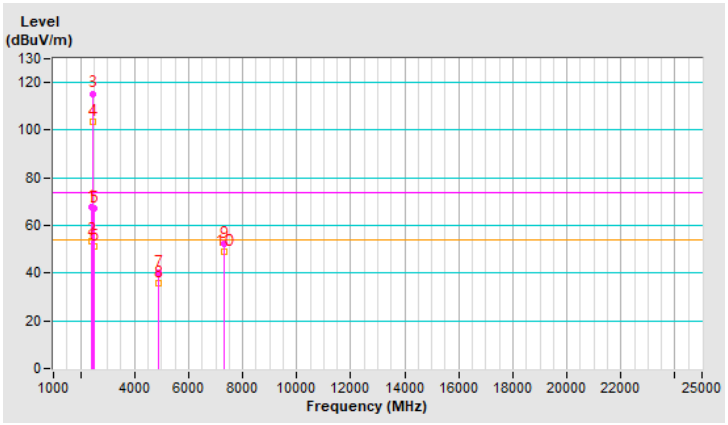


RF Mode	802.11ax (HE20)	Channel	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 300 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Ryan Du		

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	2390.00	67.7 PK	74.0	-6.3	2.14 H	140	67.8	-0.1
2	2390.00	53.7 AV	54.0	-0.3	2.14 H	140	53.8	-0.1
3	*2437.00	115.4 PK			2.14 H	140	115.5	-0.1
4	*2437.00	103.3 AV			2.14 H	140	103.4	-0.1
5	2483.50	67.1 PK	74.0	-6.9	2.14 H	140	67.3	-0.2
6	2483.50	51.1 AV	54.0	-2.9	2.14 H	140	51.3	-0.2
7	4874.00	40.4 PK	74.0	-33.6	1.44 H	25	35.8	4.6
8	4874.00	35.8 AV	54.0	-18.2	1.44 H	25	31.2	4.6
9	7311.00	52.3 PK	74.0	-21.7	1.56 H	65	40.7	11.6
10	7311.00	48.9 AV	54.0	-5.1	1.56 H	65	37.3	11.6

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

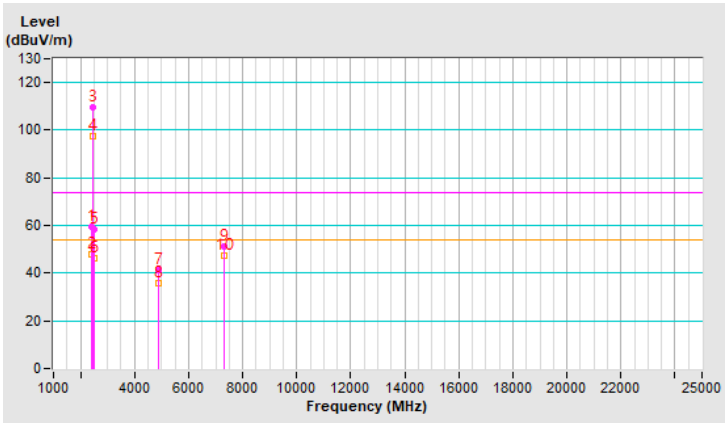


RF Mode	802.11ax (HE20)	Channel	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 300 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Ryan Du		

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	2390.00	59.7 PK	74.0	-14.3	3.64 V	273	59.8	-0.1
2	2390.00	47.8 AV	54.0	-6.2	3.64 V	273	47.9	-0.1
3	*2437.00	109.6 PK			3.64 V	273	109.7	-0.1
4	*2437.00	97.7 AV			3.64 V	273	97.8	-0.1
5	2483.50	58.5 PK	74.0	-15.5	3.64 V	273	58.7	-0.2
6	2483.50	46.5 AV	54.0	-7.5	3.64 V	273	46.7	-0.2
7	4874.00	41.3 PK	74.0	-32.7	3.14 V	259	36.7	4.6
8	4874.00	35.6 AV	54.0	-18.4	3.14 V	259	31.0	4.6
9	7311.00	51.4 PK	74.0	-22.6	4.00 V	222	39.8	11.6
10	7311.00	47.3 AV	54.0	-6.7	4.00 V	222	35.7	11.6

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

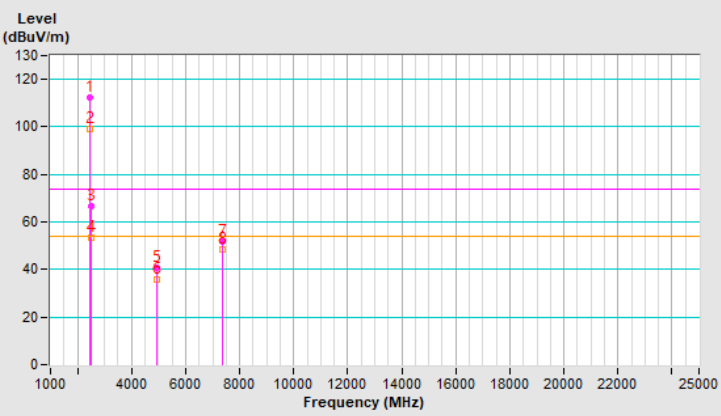


RF Mode	802.11ax (HE20)	Channel	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 300 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Ryan Du		

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	*2462.00	112.4 PK			2.53 H	33	112.4	0.0
2	*2462.00	99.3 AV			2.53 H	33	99.3	0.0
3	2483.50	66.6 PK	74.0	-7.4	2.53 H	33	66.8	-0.2
4	2483.50	53.4 AV	54.0	-0.6	2.53 H	33	53.6	-0.2
5	4924.00	40.6 PK	74.0	-33.4	1.41 H	13	35.9	4.7
6	4924.00	35.8 AV	54.0	-18.2	1.41 H	13	31.1	4.7
7	7386.00	51.8 PK	74.0	-22.2	1.63 H	44	40.2	11.6
8	7386.00	48.4 AV	54.0	-5.6	1.63 H	44	36.8	11.6

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

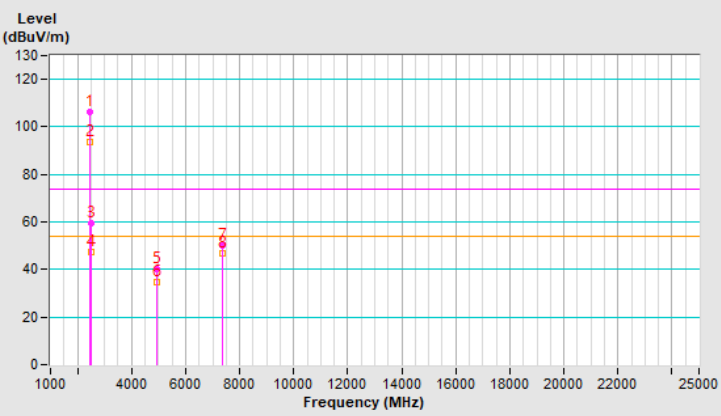


RF Mode	802.11ax (HE20)	Channel	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 300 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Ryan Du		

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	*2462.00	106.3 PK			3.67 V	41	106.3	0.0
2	*2462.00	93.7 AV			3.67 V	41	93.7	0.0
3	2483.50	59.6 PK	74.0	-14.4	3.67 V	41	59.8	-0.2
4	2483.50	47.4 AV	54.0	-6.6	3.67 V	41	47.6	-0.2
5	4924.00	40.4 PK	74.0	-33.6	3.13 V	256	35.7	4.7
6	4924.00	34.9 AV	54.0	-19.1	3.13 V	256	30.2	4.7
7	7386.00	50.3 PK	74.0	-23.7	4.00 V	235	38.7	11.6
8	7386.00	46.7 AV	54.0	-7.3	4.00 V	235	35.1	11.6

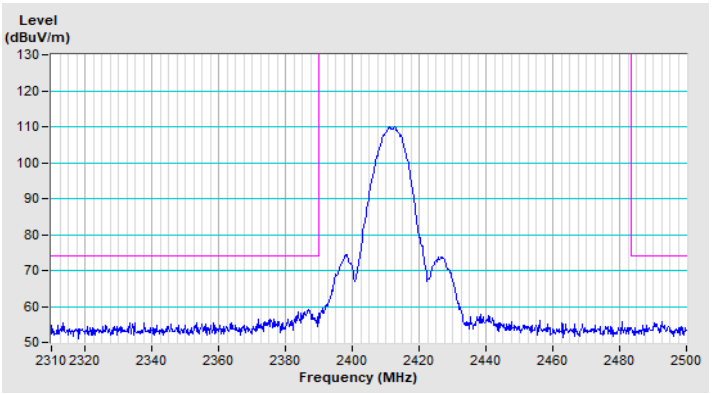
Remarks:

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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

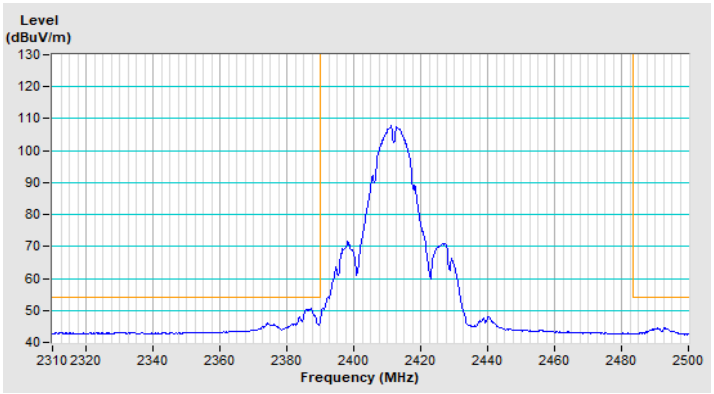


Plot of Band Edge

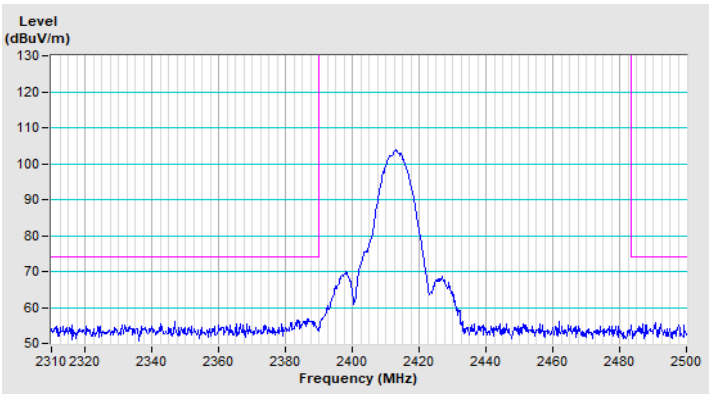
802.11b Channel 1



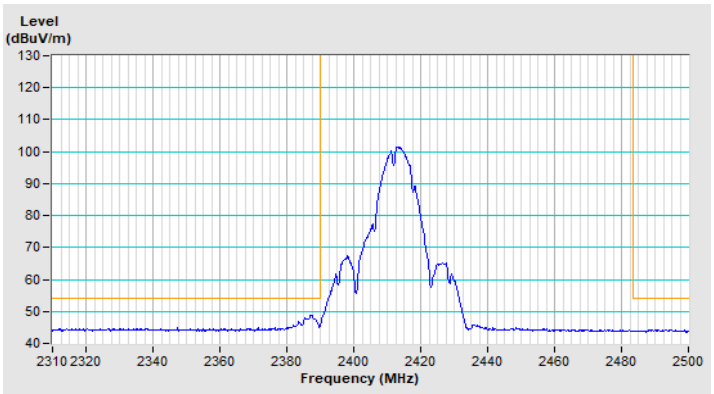
Horizontal (Peak)



Horizontal (Average)

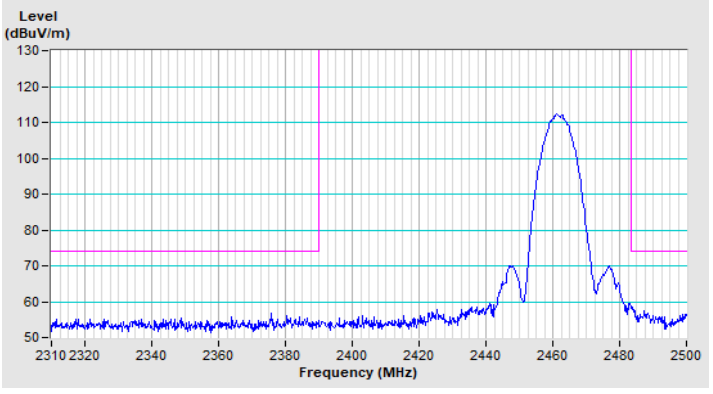


Vertical (Peak)

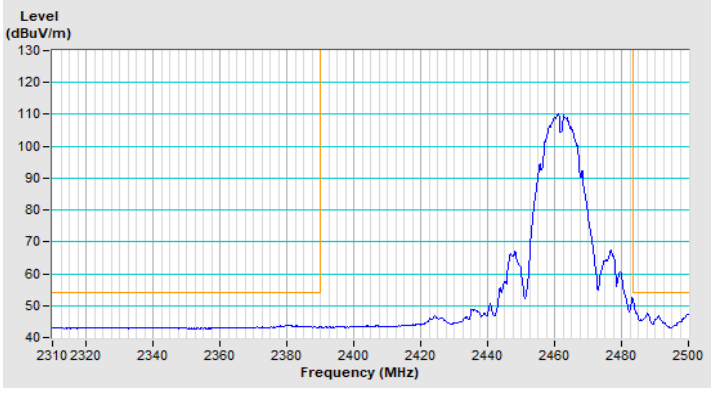


Vertical (Average)

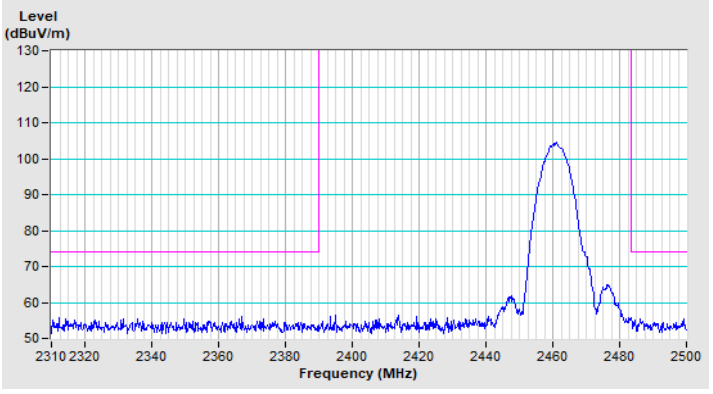
802.11b Channel 11



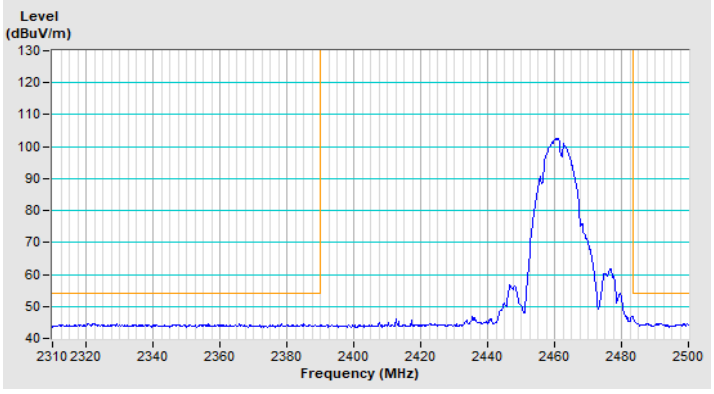
Horizontal (Peak)



Horizontal (Average)

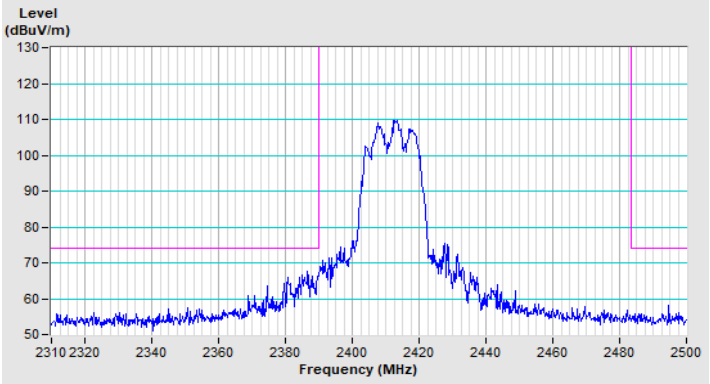


Vertical (Peak)

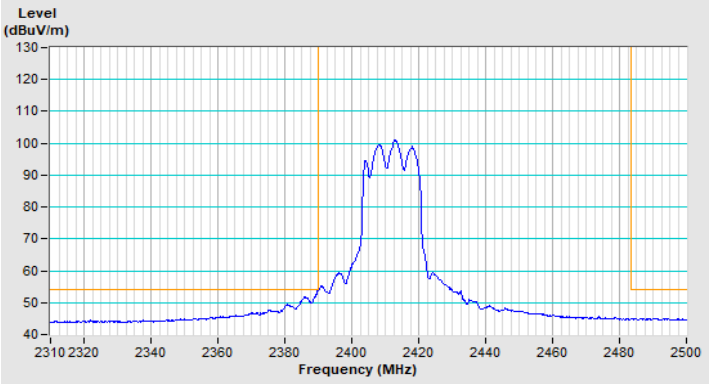


Vertical (Average)

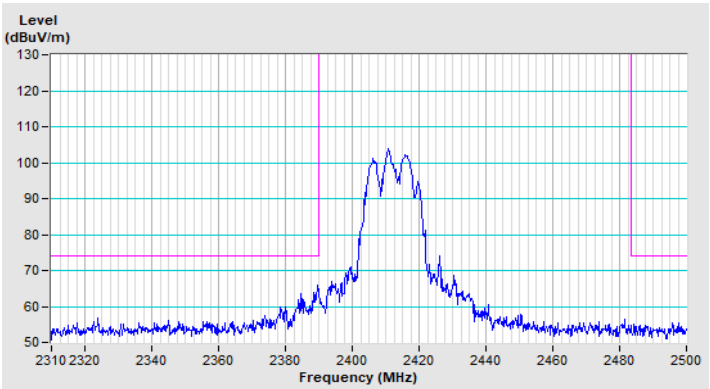
802.11g Channel 1



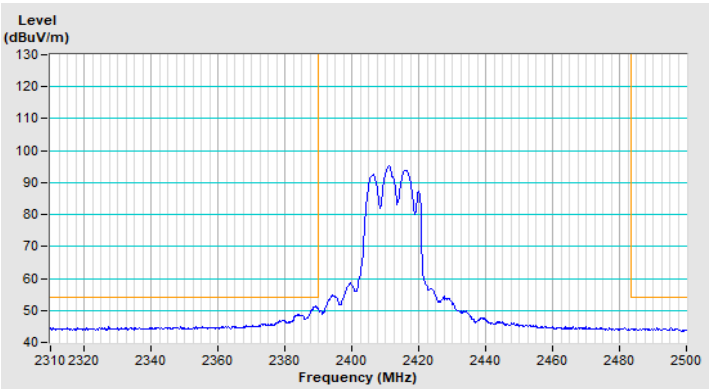
Horizontal (Peak)



Horizontal (Average)

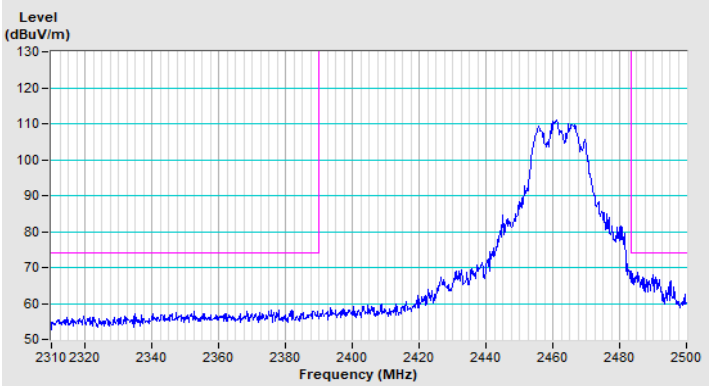


Vertical (Peak)

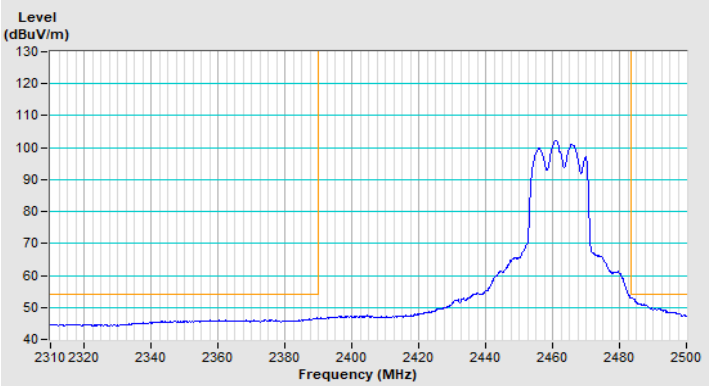


Vertical (Average)

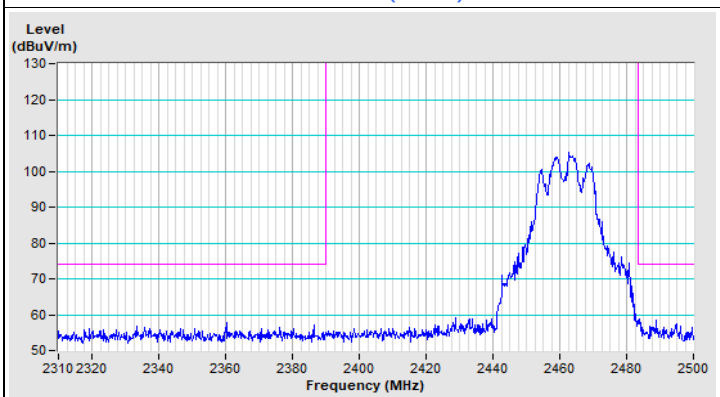
802.11g Channel 11



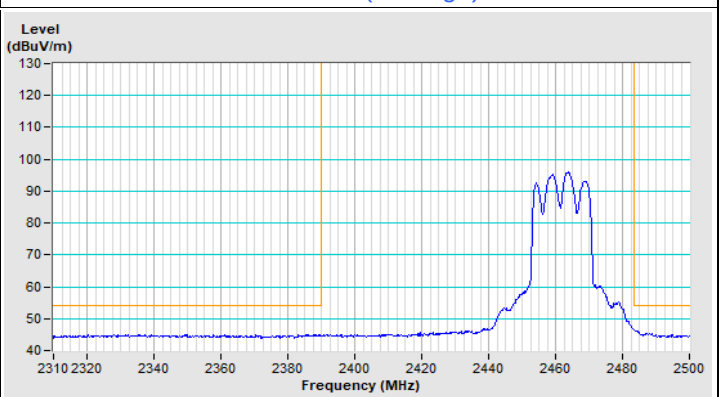
Horizontal (Peak)



Horizontal (Average)

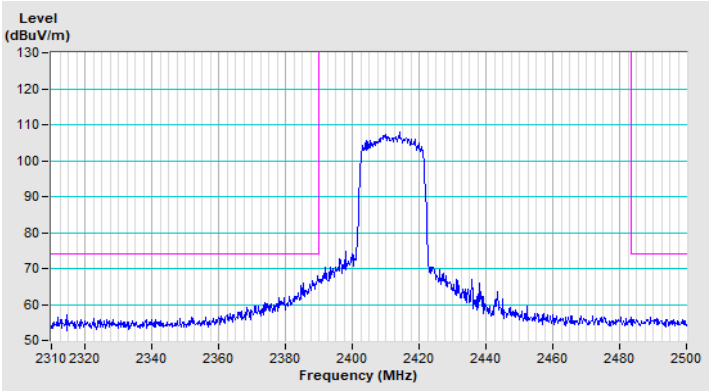


Vertical (Peak)

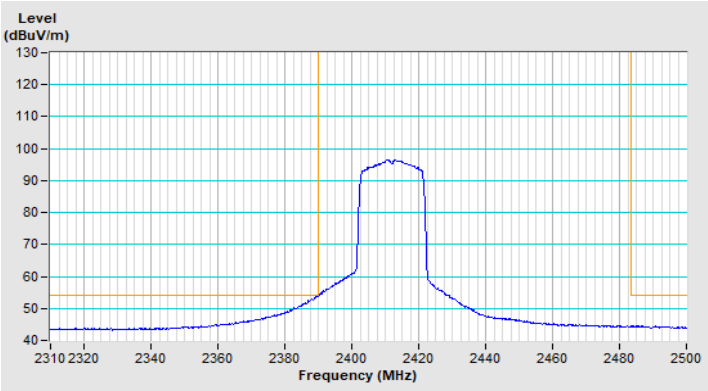


Vertical (Average)

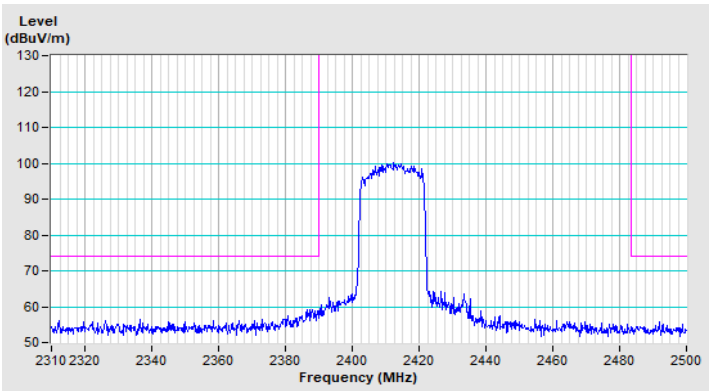
802.11ax (HE20) Channel 1



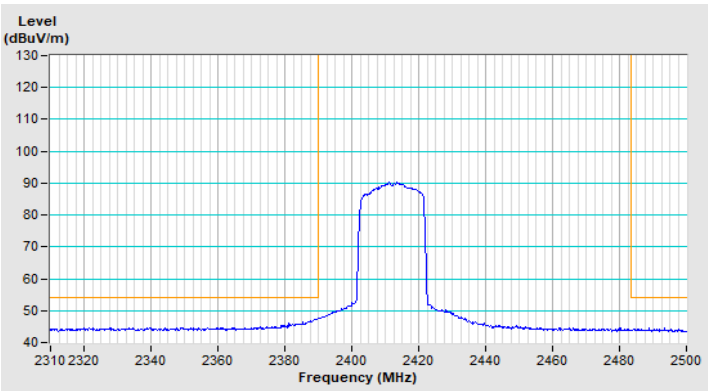
Horizontal (Peak)



Horizontal (Average)

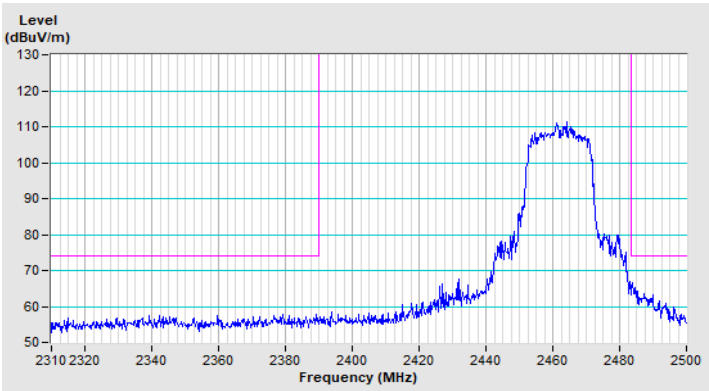


Vertical (Peak)

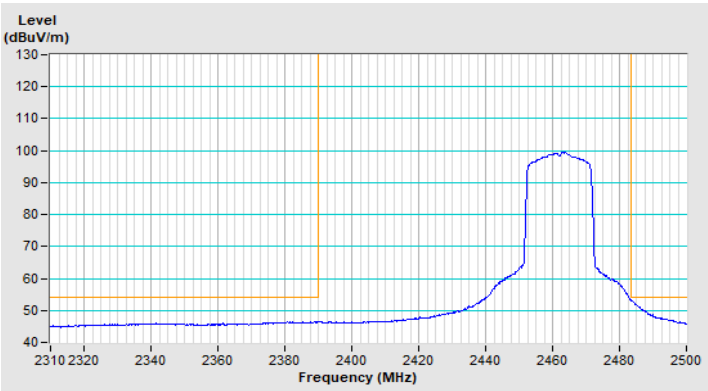


Vertical (Average)

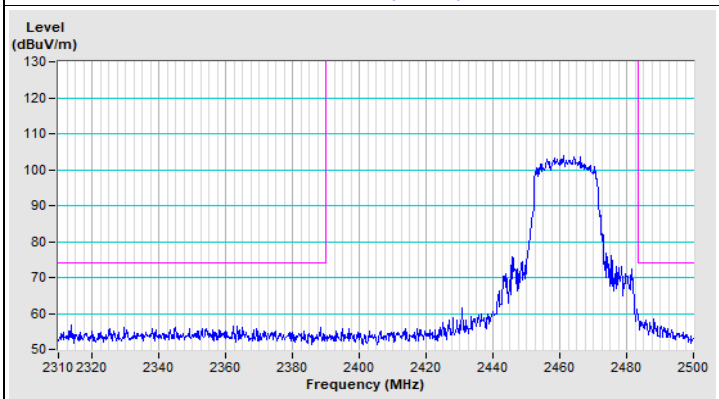
802.11ax (HE20) Channel 11



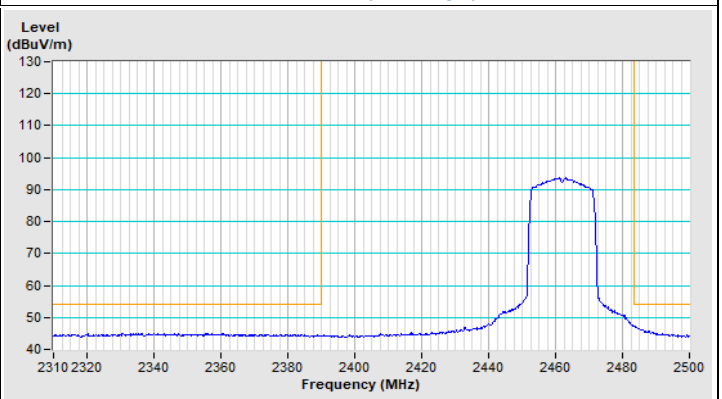
Horizontal (Peak)



Horizontal (Average)



Vertical (Peak)



Vertical (Average)

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:

Lin Kou EMC/RF Lab
Tel: 886-2-26052180
Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab
Tel: 886-3-6668565
Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab
Tel: 886-3-3183232
Fax: 886-3-3270892

Email: service.adt@bureauveritas.com
Web Site: http://ee.bureauveritas.com.tw

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

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