TEST REPORT

CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 15, Subpart C (Section 15.247)**
Report No.:	RFBECO-WTW-P22110304
FCC ID:	W7Z-WB220501
Product:	Hostless Dual-Band Wi-Fi + BLE Module
Brand:	CEL
Model No.:	CEL8721D
Received Date:	2022/11/16
Test Date:	2022/11/21 ~ 2023/1/5
Issued Date:	2023/2/9
Applicant:	California Eastern Laboratories
Address:	5201 Great America Pkwy Suite 320 Santa Clara, CA 95054 United States Of America
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:** 2023/2/9

May Chen / Manager

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Prepared by : Vivian Huang / Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBECO-WTW-P22110304	Original release.	2023/2/9

1 Certificate

Product:	Hostless Dual-Band Wi-Fi + BLE Module
Brand:	CEL
Test Model:	CEL8721D
Sample Status:	Engineering sample
Applicant:	California Eastern Laboratories
Test Date:	2022/11/21 ~ 2023/1/5
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

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 -13.89 dB at 0.57585 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -5.1 dB at 30.02 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.1 dB at 2390.00, 4824.00 MHz
15.203	Antenna Requirement	Pass	Antenna connector is ipex(MHF) not a standard connector.

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:

Measurement	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	5.1 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	5.0 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	Hostless Dual-Band Wi-Fi + BLE Module
Brand	CEL
Test Model	CEL8721D
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
Modulation Technology	DSSS, OFDM
Transfer Rate	802.11b: up to 11 Mbps 802.11g: up to 54 Mbps 802.11n: up to 150 Mbps
Operating Frequency	2.412 GHz ~ 2.462 GHz
Number of Channel	802.11b, 802.11g, 802.11n (HT20): 11 802.11n (HT40): 7
Output Power	612.35 mW (27.87 dBm)

Note:

1. There are Bluetooth and WLAN (2.4 GHz & 5 GHz) technology used for the EUT.
2. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna NO.	RF Chain NO.	Brand	Model	Antenna Net Gain(dBi)	Frequency range	Antenna Type	Connector Type	Cable Length
1	0	MAG.LAYERS	MSA-4008-25GC1-A2	2.98	2.4~2.5GHz	PIFA	ipex(MHF)	150mm
				5.16	5.15~5.85GHz			
2	0	CEL	0027-02-07-00-001	2.1	2.4~2.5GHz	PIFA	none	none
				3.5	5.15~5.85GHz			

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

2. The EUT incorporates a SISO function:

2.4 GHz Band		
Modulation Mode	**TX & RX Configuration**	
802.11b	1TX	1RX
802.11g	1TX	1RX
802.11n (HT20)	1TX	1RX
802.11n (HT40)	1TX	1RX

3.3 Channel List

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

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		

7 channels are provided for 802.11n (HT40):

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

3.4 Test Mode Applicability and Tested Channel Detail

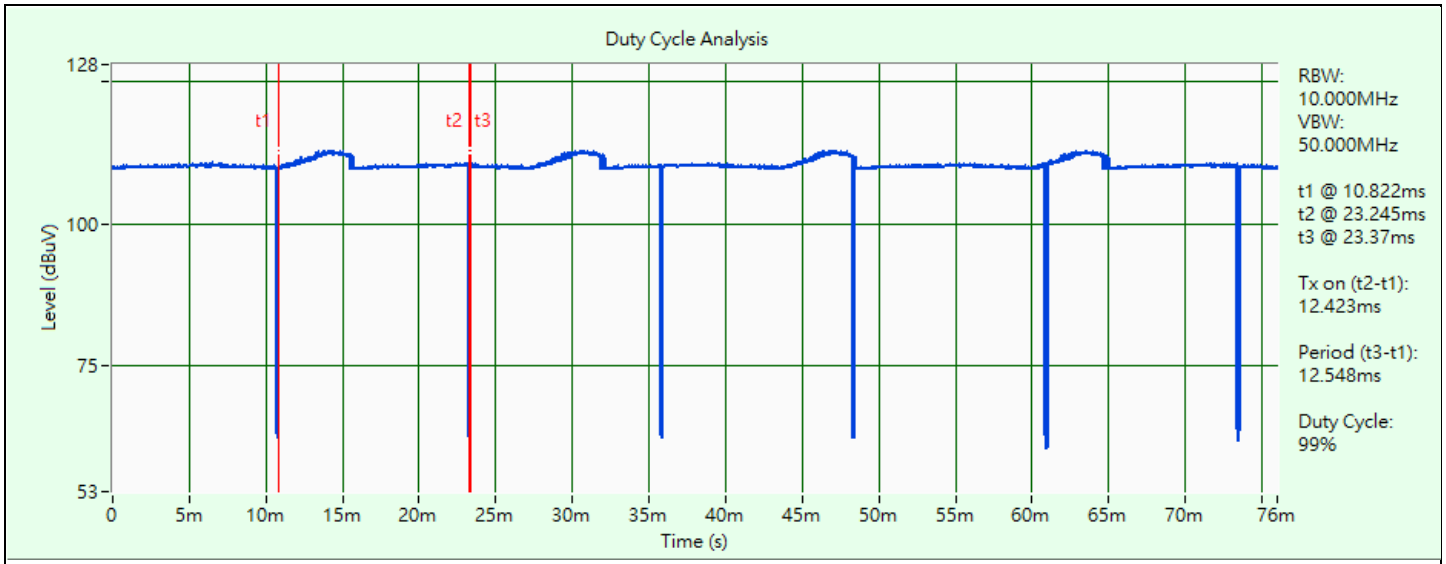
Pre-Scan:	1. PIFA Antenna (MSA-4008-25GC1-A2) can be used in the following ways: X-axis/ Y-axis/ Z-axis/ Ant Pre-scan these ways and find the worst case as a representative test condition. 2. PIFA Antenna (0027-02-07-00-001) can be used in the following ways: X-axis/ Y-axis/ Z-axis/ Ant. Pre-scan these ways and find the worst case as a representative test condition. 3. 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.PIFA Antenna (MSA-4008-25GC1-A2) Worst Condition: Unwanted Emissions below 1 GHz:X-axis Unwanted Emissions above 1 GHz:X-axis 2.PIFA Antenna (0027-02-07-00-001) Worst Condition: Unwanted Emissions below 1 GHz:X-axis Unwanted Emissions above 1 GHz:X-axis

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

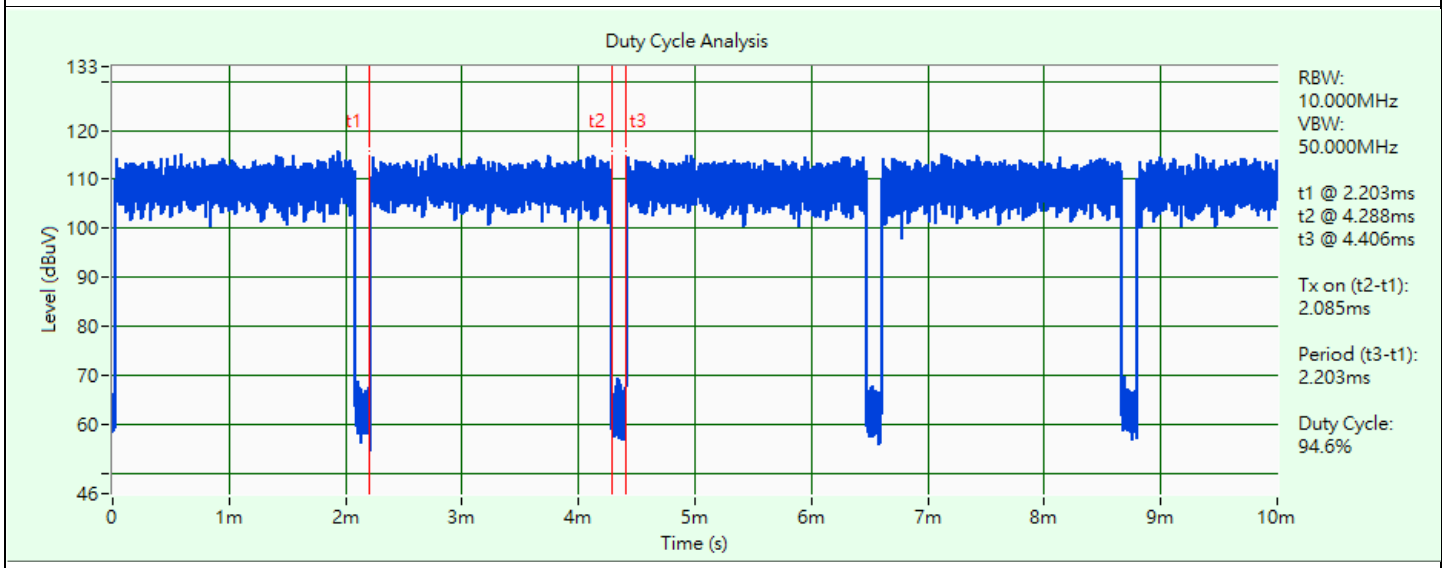
Test Item	EUT Configure Mode	Mode	Tested Channel	Modulation	Data Rate Parameter
RF Output Power / Power Spectral Density	-	802.11b	1, 6, 11	DBPSK	1Mb/s
		802.11g	1, 6, 11	BPSK	6Mb/s
		802.11n (HT20)	1, 6, 11	BPSK	MCS0
		802.11n (HT40)	3, 6, 9	BPSK	MCS0
6 dB Bandwidth / Conducted Out of Band Emissions	-	802.11b	1, 6, 11	DBPSK	1Mb/s
		802.11g	1, 6, 11	BPSK	6Mb/s
		802.11n (HT20)	1, 6, 11	BPSK	MCS0
		802.11n (HT40)	3, 6, 9	BPSK	MCS0
AC Power Conducted Emissions	A	802.11n (HT20)	6	BPSK	MCS0
Unwanted Emissions below 1 GHz	A, B	802.11n (HT20)	6	BPSK	MCS0
Unwanted Emissions above 1 GHz	A, B	802.11b	1, 6, 11	DBPSK	1Mb/s
		802.11g	1, 6, 11	BPSK	6Mb/s
		802.11n (HT20)	1, 6, 11	BPSK	MCS0
		802.11n (HT40)	3, 6, 9	BPSK	MCS0
EUT Configure Mode:	A	PIFA Antenna (MSA-4008-25GC1-A2)			
	B	PIFA Antenna (0027-02-07-00-001)			

3.5 Duty Cycle of Test Signal

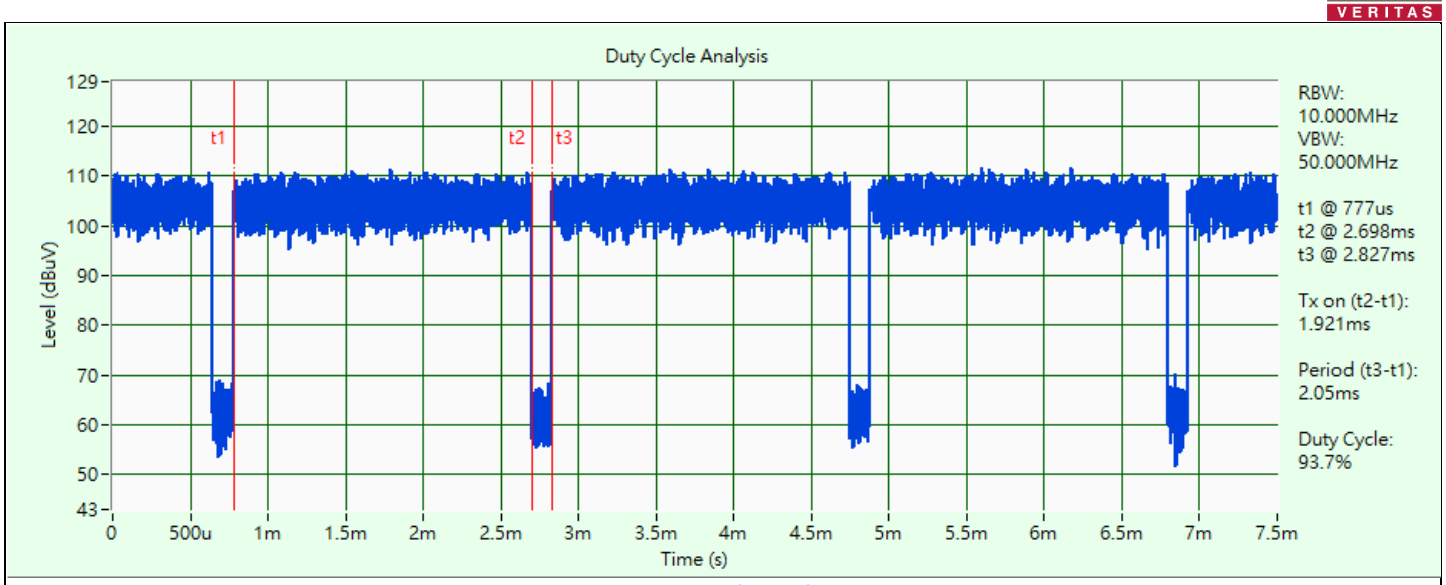
802.11b: Duty cycle = 12.423 ms / 12.548 ms x 100% = 99.0%
802.11g: Duty cycle = 2.085 ms / 2.203 ms x 100% = 94.6%, duty factor = 10 * log (1/Duty cycle) = 0.24 dB
802.11n (HT20): Duty cycle = 1.921 ms / 2.05 ms x 100% = 93.7%, duty factor = 10 * log (1/Duty cycle) = 0.28 dB
802.11n (HT40): Duty cycle = 0.945 ms / 1.074 ms x 100% = 88.0%, duty factor = 10 * log (1/Duty cycle) = 0.56 dB



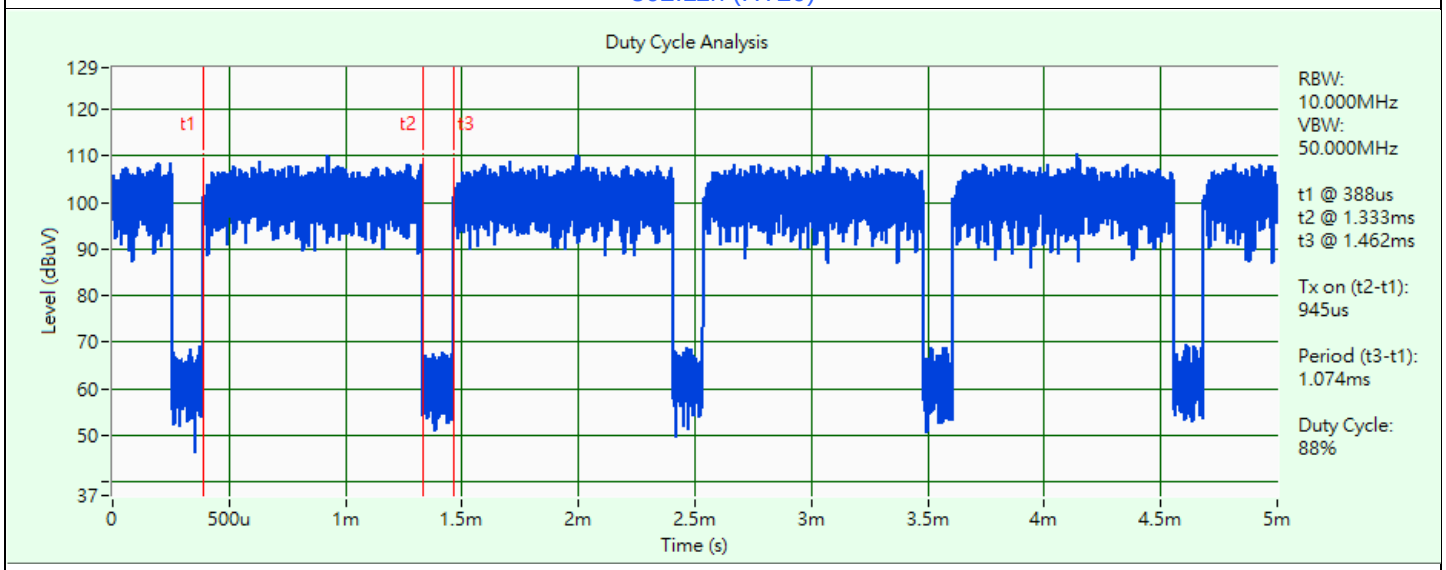
802.11b



802.11g



802.11n (HT20)



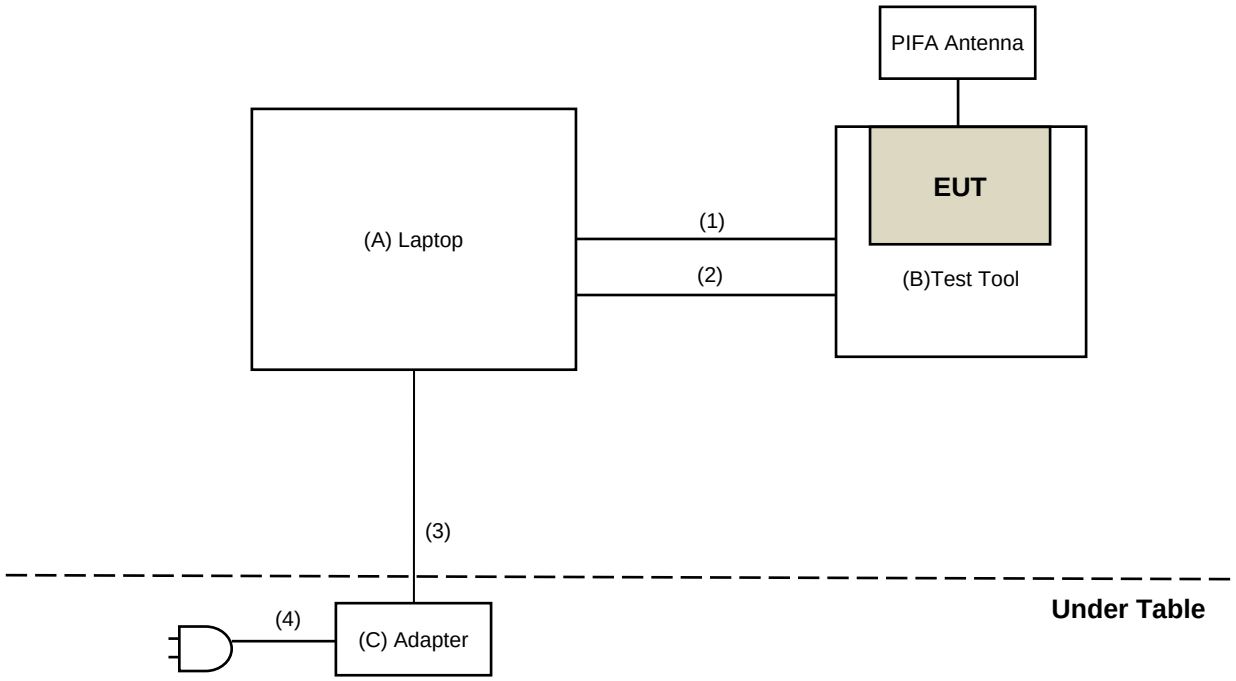
802.11n (HT40)

3.6 Test Program Used and Operation Descriptions

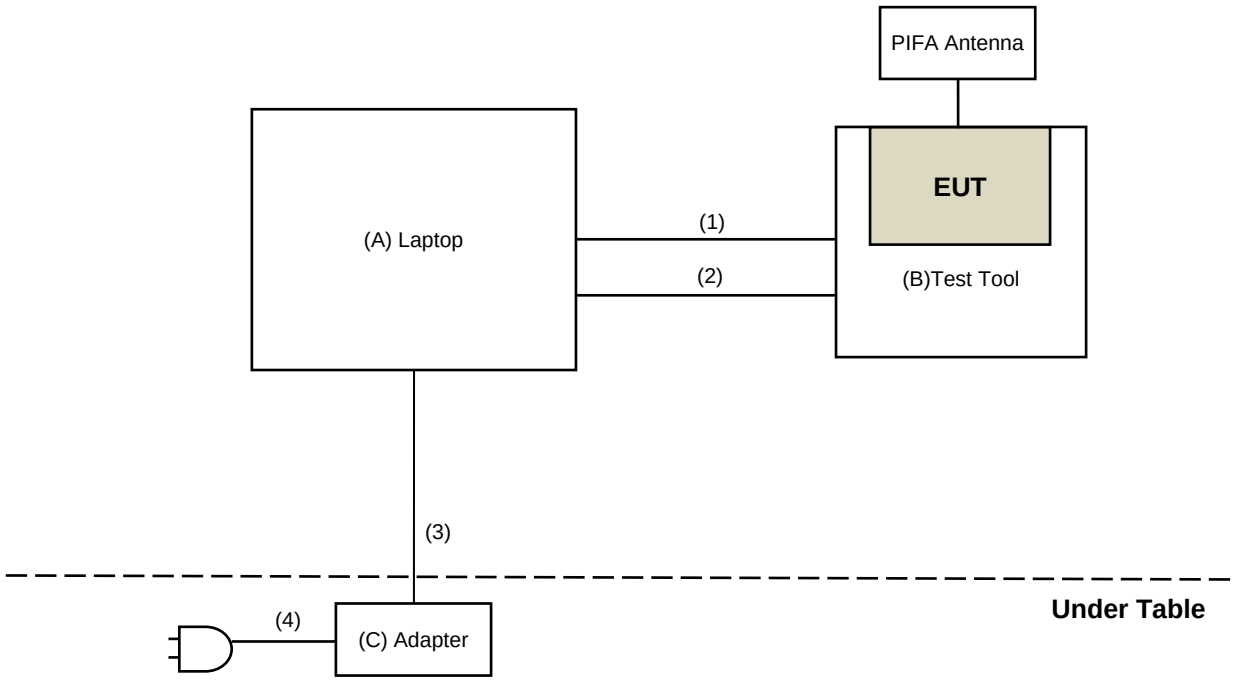
Controlling software (AmebaD_mptool_2V1) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices

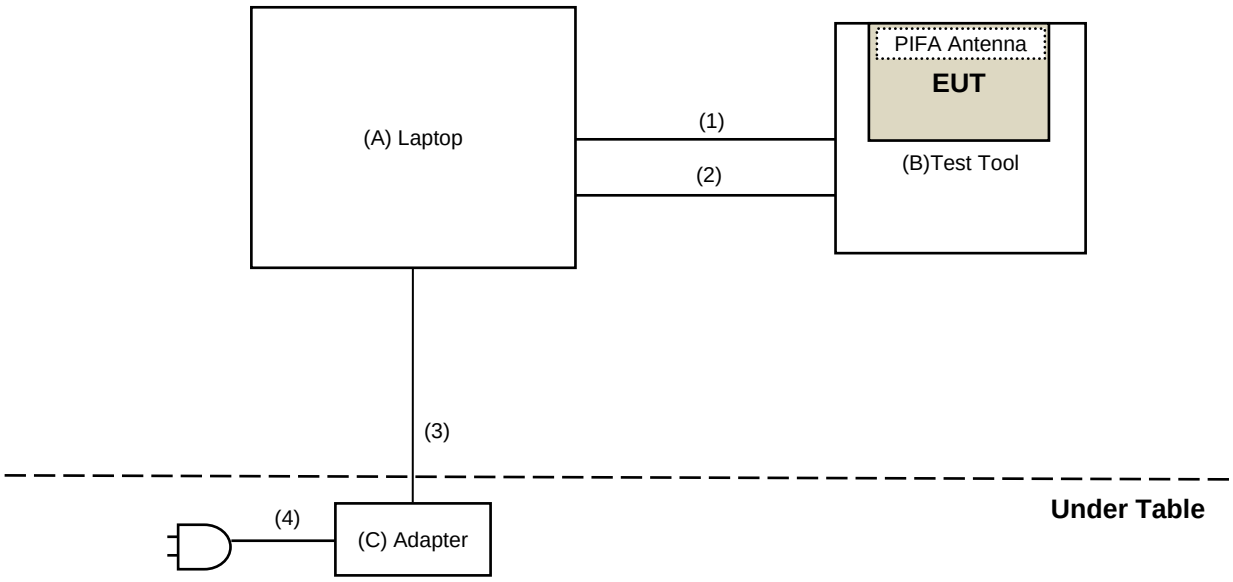
For AC Power Conducted Emission test



For Unwanted Emission test Mode A



For Unwanted Emission test Mode B



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Laptop	Lenovo	20U5S01X00 L14	PF-28LKK7	N/A	Provided by Lab
B	Test Tool	AzureWave	N/A	N/A	N/A	Supplied by applicant
C	Adapter	Lenovo	ADLX45YLC3D	N/A	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	USB Cable	1	1.8	Yes	0	Provided by Lab
2	USB Cable	1	1.8	Yes	0	Provided by Lab
3	DC Cable	1	1.8	No	0	Provided by Lab
4	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
Power Meter Anritsu	ML2495A	1529002	2022/6/22	2023/6/21
Pulse Power Sensor Anritsu	MA2411B	1726434	2022/6/22	2023/6/21
Attenuator WOKEN	MDCS18N-10	MDCS18N-10-01	2022/4/5	2023/4/4
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: 2022/12/31

4.2 Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Attenuator WOKEN	MDCS18N-10	MDCS18N-10-01	2022/4/5	2023/4/4
Software	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer Keysight	N9020B	MY60112409	2022/3/11	2023/3/10

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2022/12/31

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
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
TEST RECEIVER R&S	ESCS 30	847124/029	2022/10/14	2023/10/13

Notes:

1. The test was performed in Conduction 1
2. Tested Date: 2023/1/5

4.6 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Bilog Antenna Schwarzbeck	VULB 9168	9168-0942	2022/10/20	2023/10/19
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-01	2022/1/10	2023/1/9
LOOP ANTENNA Electro-Metrics	EM-6879	264	2022/3/18	2023/3/17
Pre_Amplifier EMCI	EMC001340	980142	2022/6/2	2023/6/1
Pre_Amplifier(20M-3G) EMCI	EMC330N	980852	2022/3/28	2023/3/27
RF Coaxial Cable COMMATE/PEWC	8D	966-6-1	2022/4/25	2023/4/24
		966-6-2	2022/4/25	2023/4/24
		966-6-3	2022/4/25	2023/4/24
RF Coaxial Cable JYEBO	5D-FB	LOOPCAB-001	2022/1/6	2023/1/5
		LOOPCAB-002	2022/12/19	2023/12/18
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A
Spectrum Analyzer Keysight	N9020B	MY60112410	2022/3/13	2023/3/12
Test Receiver KEYSIGHT	N9038A	MY59050100	2022/6/20	2023/6/19

Notes:

1. The test was performed in 966 Chamber No. 6.
2. Tested Date: 2022/12/29

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-2035	2022/11/13	2023/11/12
	BBHA 9170	BBHA9170519	2022/11/13	2023/11/12
Pre_Amplifier EMCI	EMC12630SE	980385	2022/8/15	2023/8/14
	EMC184045SE	980387	2022/1/10	2023/1/9
RF Cable EMCI	EMC104-SM-SM-1300	210205	2022/5/10	2023/5/9
RF Cable-Frequency range: 1-40GHz EMCI	EMC102-KM-KM-1200	160924	2022/1/10	2023/1/9
RF Coaxial Cable EMCI	EMC-KM-KM-4000	200214	2022/3/8	2023/3/7
	EMC101G-KM-KM-10000	210708	2022/11/4	2023/11/3
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A
Spectrum Analyzer Keysight	N9020B	MY60112410	2022/3/13	2023/3/12
Test Receiver KEYSIGHT	N9038A	MY59050100	2022/6/20	2023/6/19

Notes:

1. The test was performed in 966 Chamber No. 6.
2. Tested Date: 2022/11/21 ~ 2022/12/30

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)

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

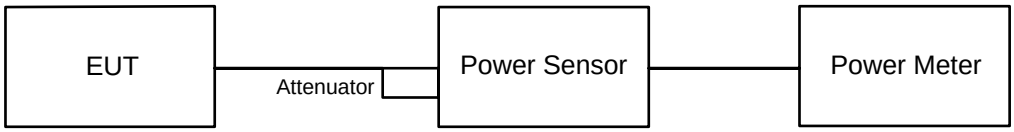
Notes:

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



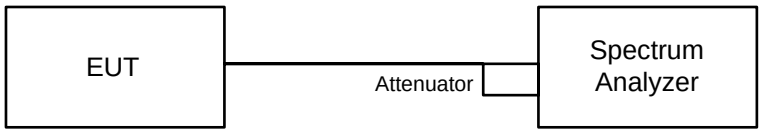
6.1.2 Test Procedure

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

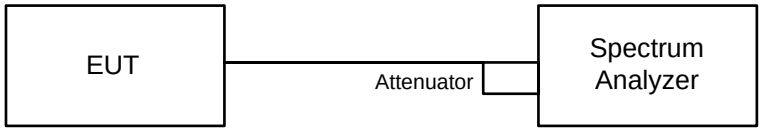


6.2.2 Test Procedure

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

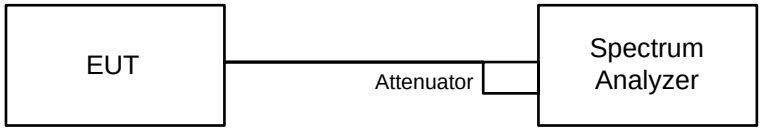


6.3.2 Test Procedure

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

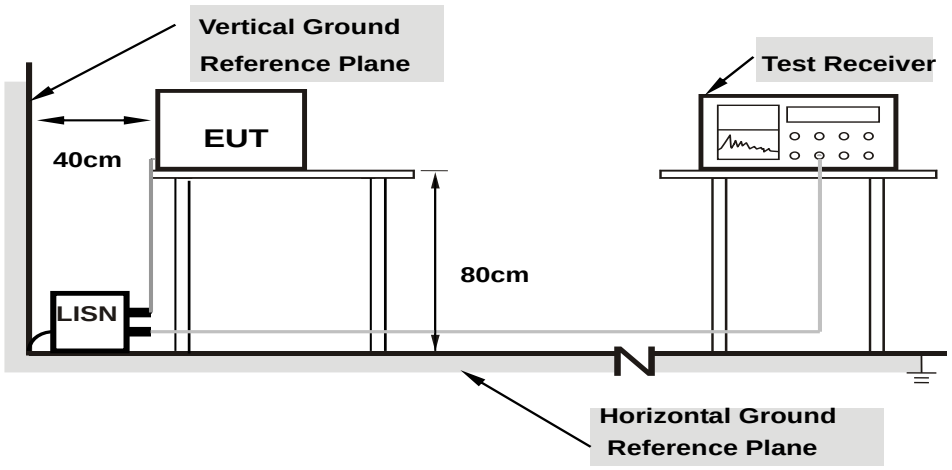
a. Set the RBW = 100 kHz.
b. Set the VBW ≥ 300 kHz.
c. Detector = peak.
d. Sweep time = auto couple.
e. Trace mode = max hold.
f. Allow trace to fully stabilize.
g. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

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.

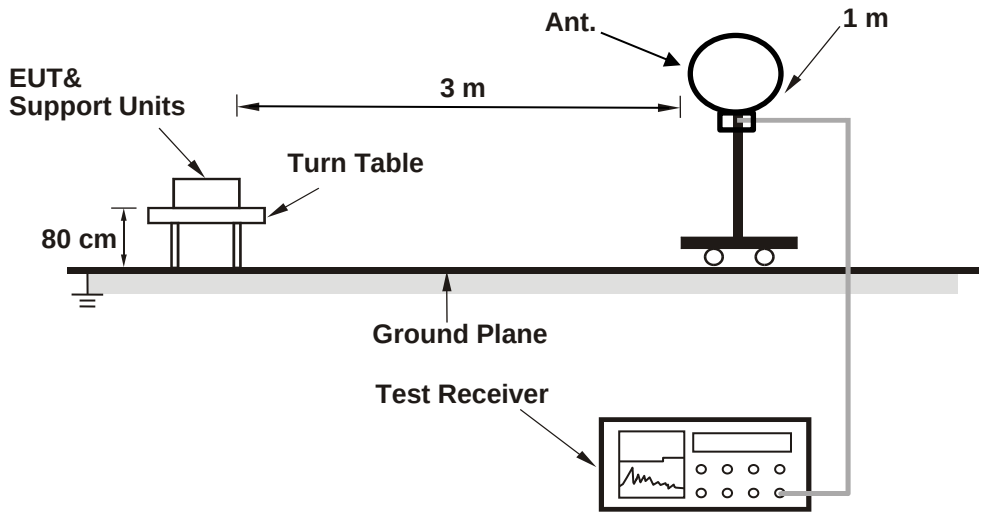
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

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.

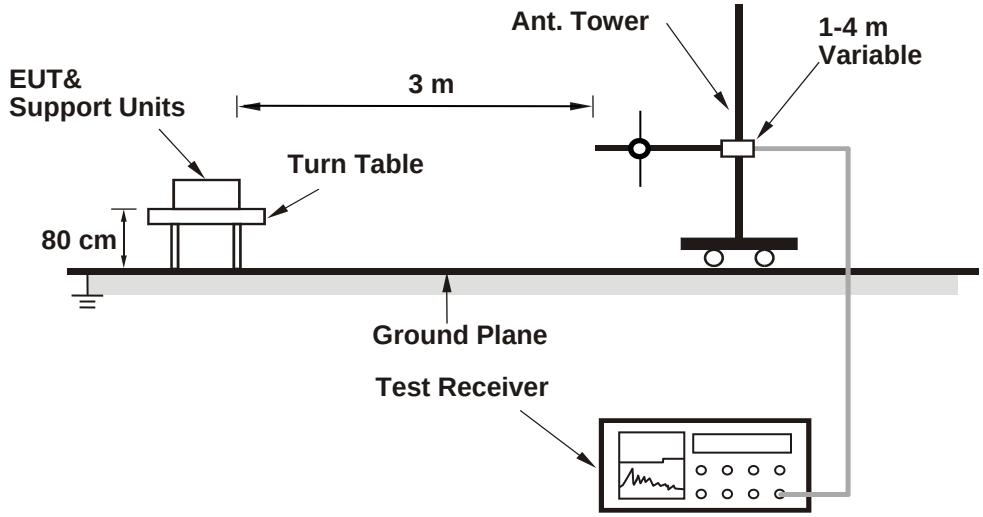
6.6 Unwanted Emissions below 1 GHz

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.

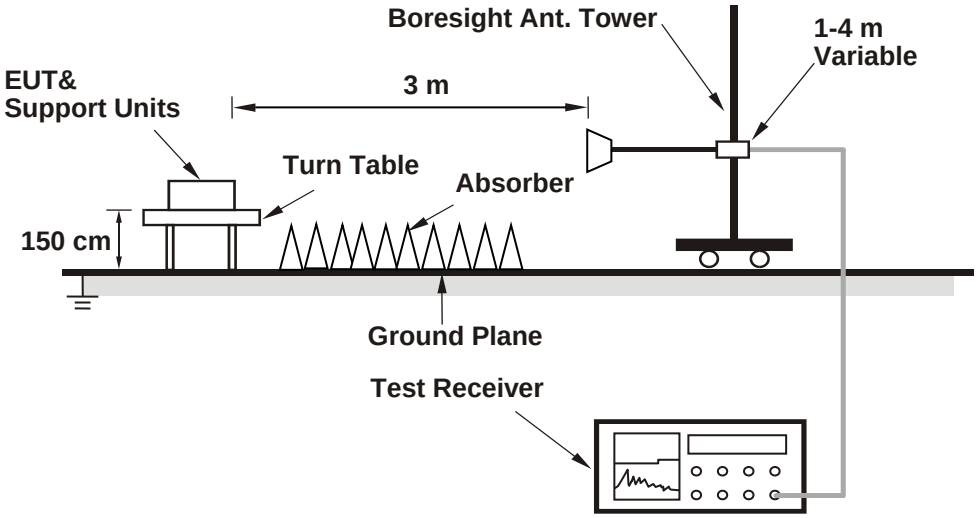
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

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:	Katina Lu

For Peak Power

802.11b

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2412	184.077	22.65	30	Pass
6	2437	145.211	21.62	30	Pass
11	2462	126.765	21.03	30	Pass

Note: The antenna gain is 2.98 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2412	517.607	27.14	30	Pass
6	2437	609.537	27.85	30	Pass
11	2462	498.884	26.98	30	Pass

Note: The antenna gain is 2.98 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2412	505.825	27.04	30	Pass
6	2437	612.35	27.87	30	Pass
11	2462	451.856	26.55	30	Pass

Note: The antenna gain is 2.98 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT40)

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
3	2422	438.531	26.42	30	Pass
6	2437	476.431	26.78	30	Pass
9	2452	377.572	25.77	30	Pass

Note: The antenna gain is 2.98 dBi < 6 dBi, so the output power limit shall not be reduced.

For Average Power

802.11b

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	108.643	20.36
6	2437	85.704	19.33
11	2462	74.473	18.72

802.11g

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	96.605	19.85
6	2437	264.85	24.23
11	2462	96.383	19.84

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	93.756	19.72
6	2437	265.461	24.24
11	2462	76.384	18.83

802.11n (HT40)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
3	2422	75.336	18.77
6	2437	106.17	20.26
9	2452	66.222	18.21

7.2 Power Spectral Density

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

802.11b

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-2.56	8.00	Pass
6	2437	-3.60	8.00	Pass
11	2462	-4.04	8.00	Pass

Note: The antenna gain is 2.98 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-5.74	8.00	Pass
6	2437	-1.82	8.00	Pass
11	2462	-5.31	8.00	Pass

Note: The antenna gain is 2.98 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-6.51	8.00	Pass
6	2437	-2.30	8.00	Pass
11	2462	-7.91	8.00	Pass

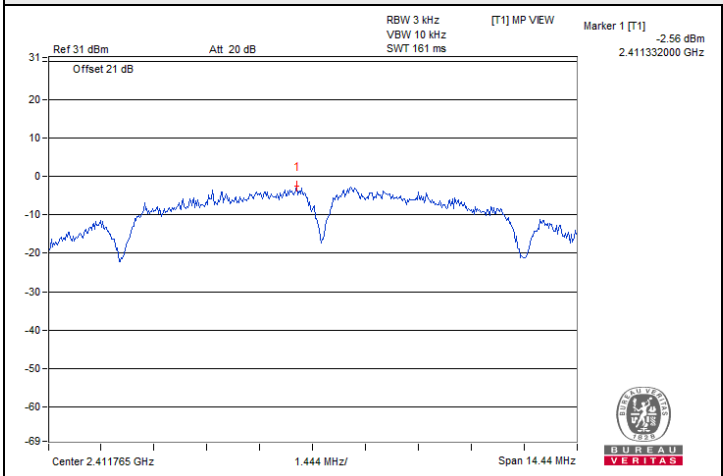
Note: The antenna gain is 2.98 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11n (HT40)

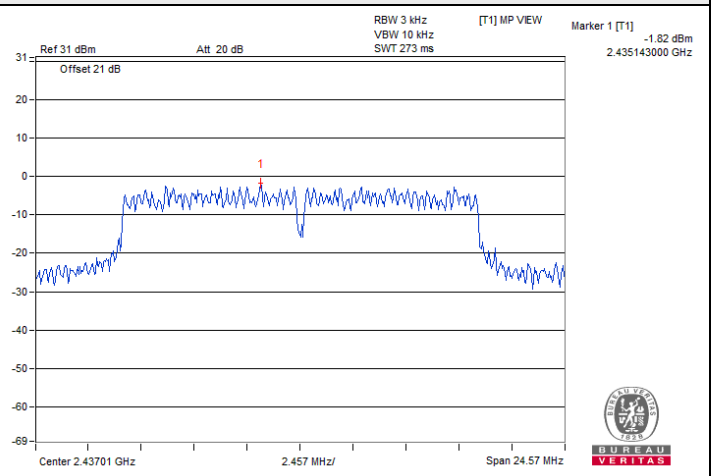
Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
3	2422	-10.78	8.00	Pass
6	2437	-9.02	8.00	Pass
9	2452	-11.97	8.00	Pass

Note: The antenna gain is 2.98 dBi < 6 dBi, so the power density limit shall not be reduced.

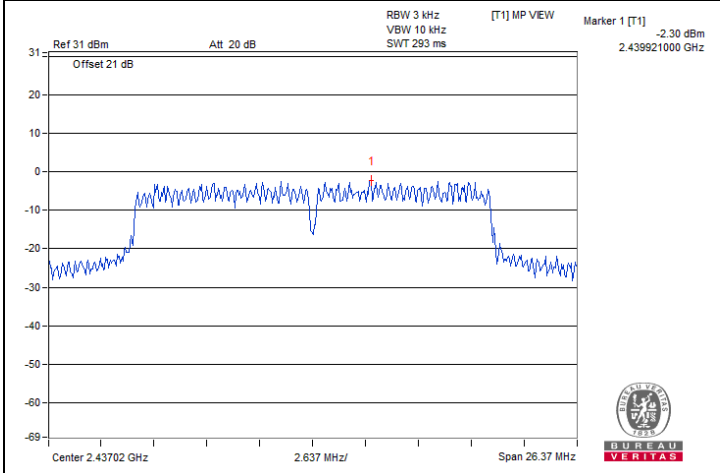
Spectrum Plot of Maximum Value



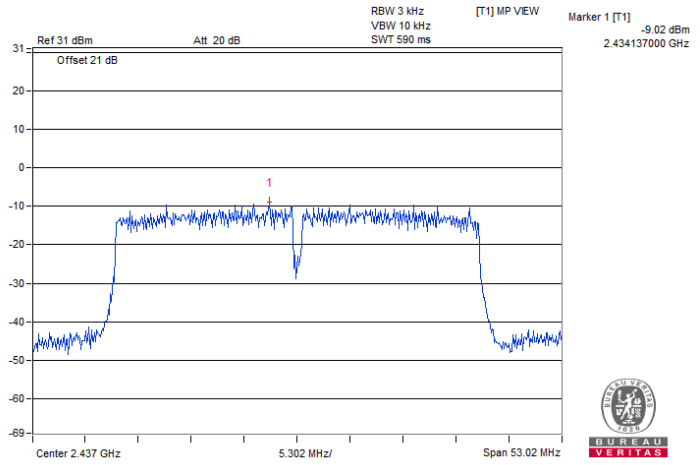
802.11b : CH 1



802.11g : CH 6



802.11n (HT20) : CH 6



802.11n (HT40) : CH 6

7.3 6 dB Bandwidth

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

802.11b

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	9.63	0.5	Pass
6	2437	10.09	0.5	Pass
11	2462	10.07	0.5	Pass

802.11g

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	16.42	0.5	Pass
6	2437	16.38	0.5	Pass
11	2462	16.4	0.5	Pass

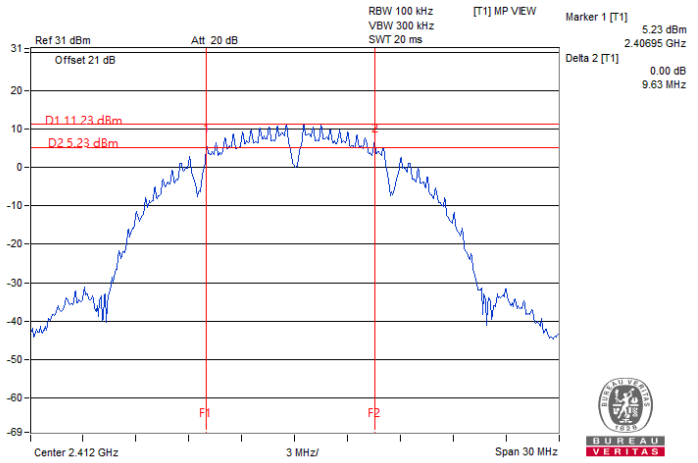
802.11n (HT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	17.59	0.5	Pass
6	2437	17.58	0.5	Pass
11	2462	17.61	0.5	Pass

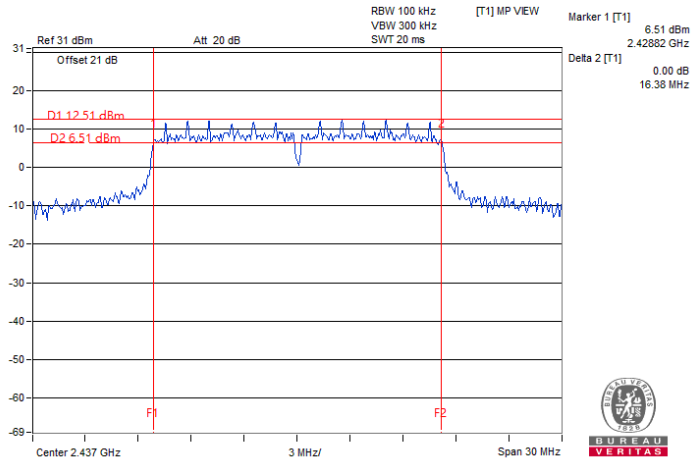
802.11n (HT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
3	2422	35.38	0.5	Pass
6	2437	35.35	0.5	Pass
9	2452	35.39	0.5	Pass

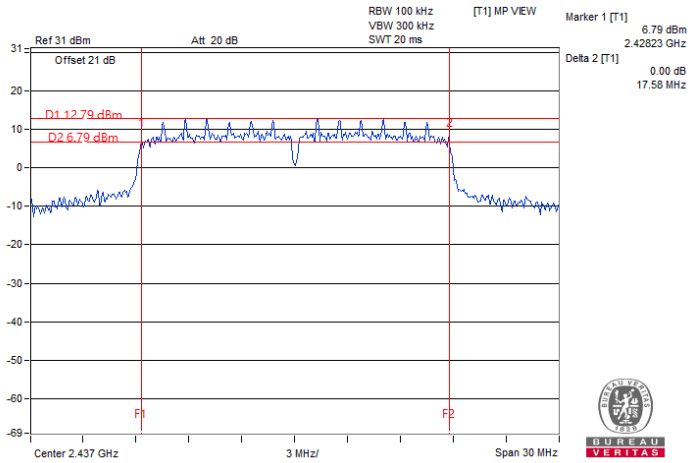
Spectrum Plot of Minimum Value



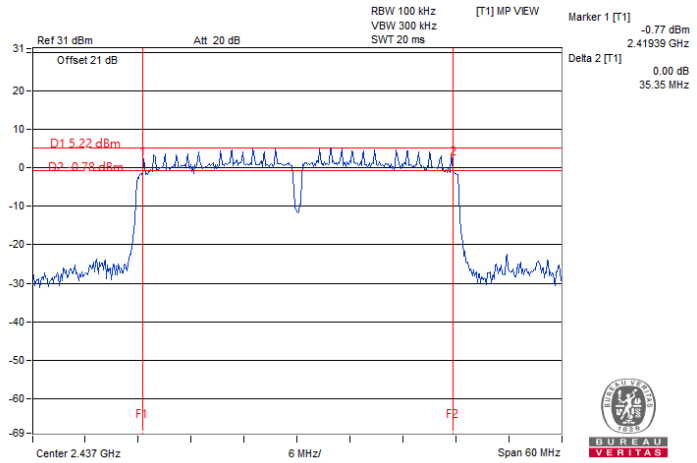
802.11b : CH 1



802.11g : CH 6



802.11n (HT20) : CH 6

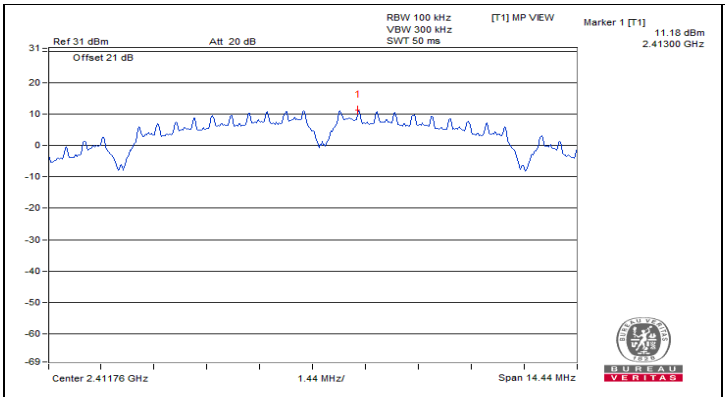


802.11n (HT40) : CH 6

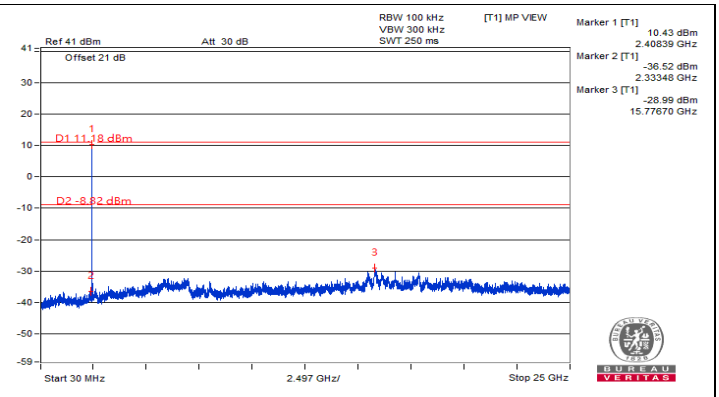
7.4 Conducted Out of Band Emissions

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

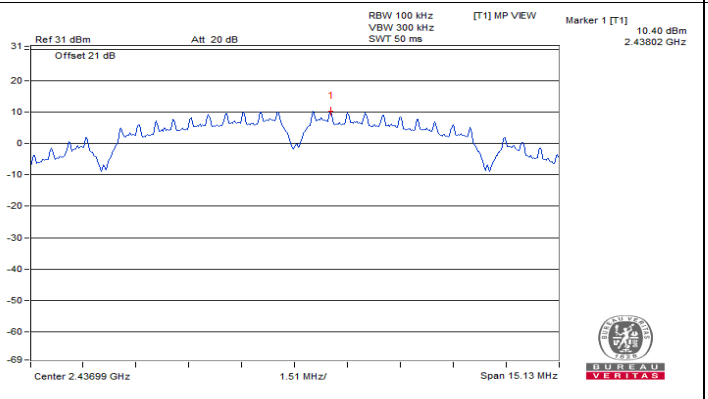
802.11b



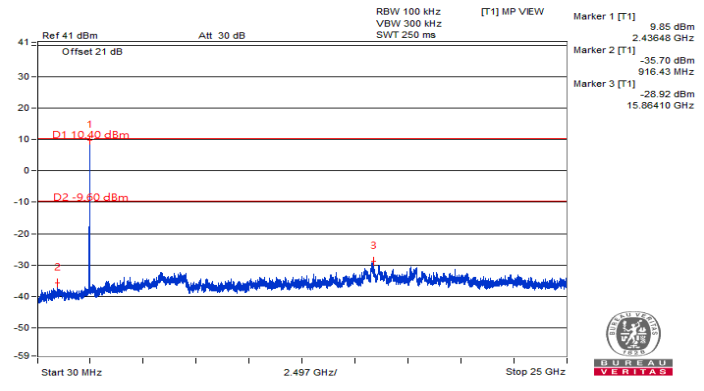
CH 1



CH 1



CH 6



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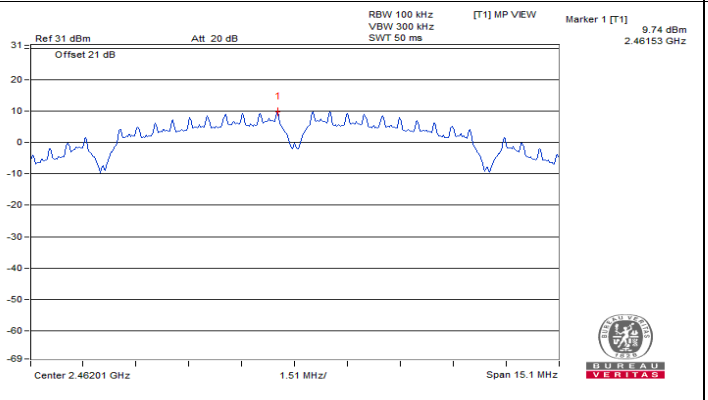
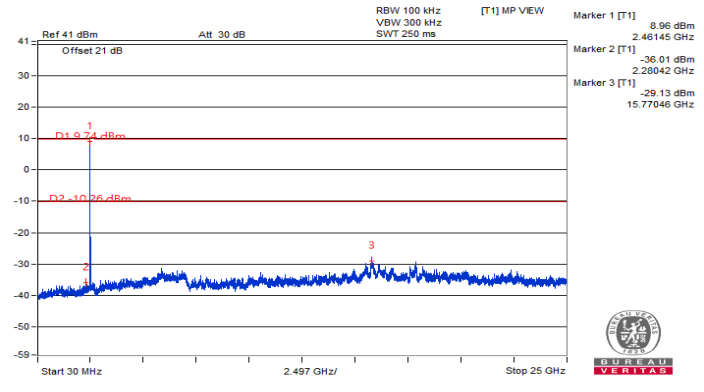
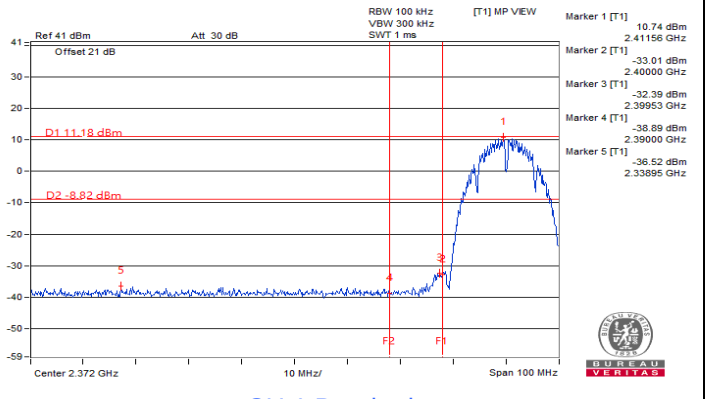


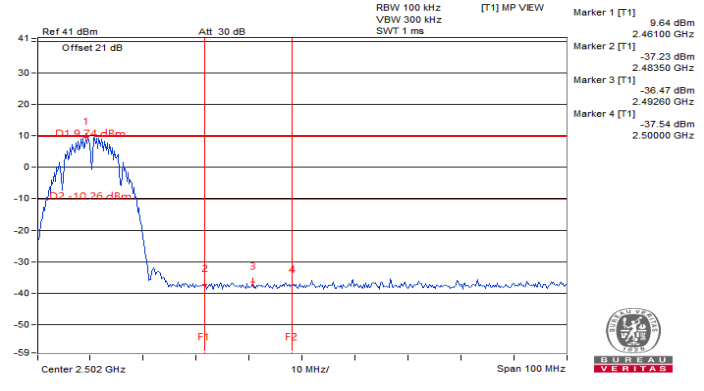
CH 11



CH 11

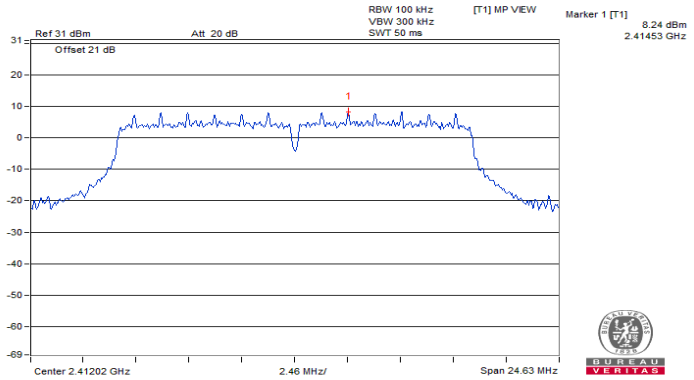


CH 1 Band edge

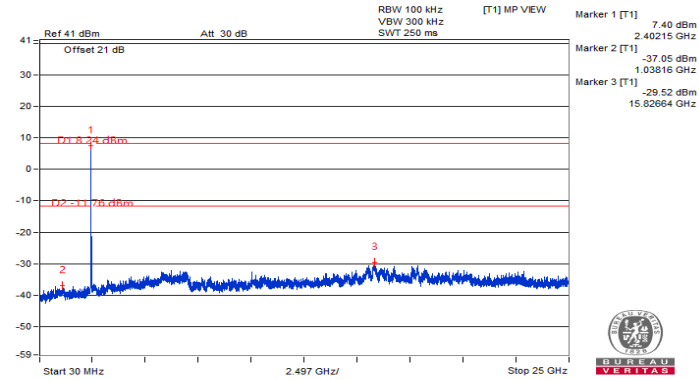


CH 11 Band edge

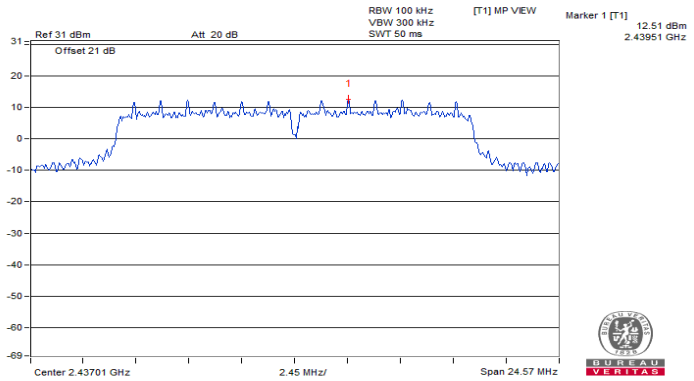
802.11g



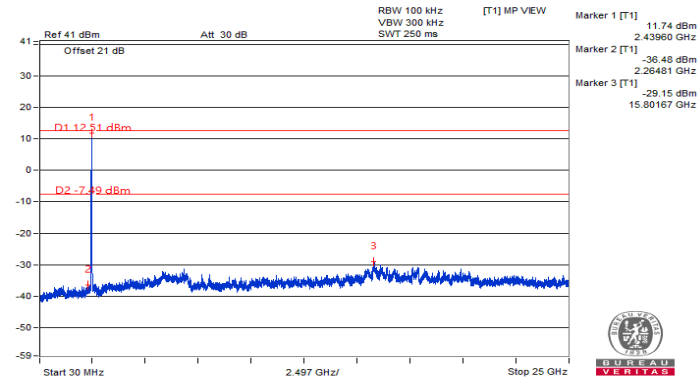
CH 1



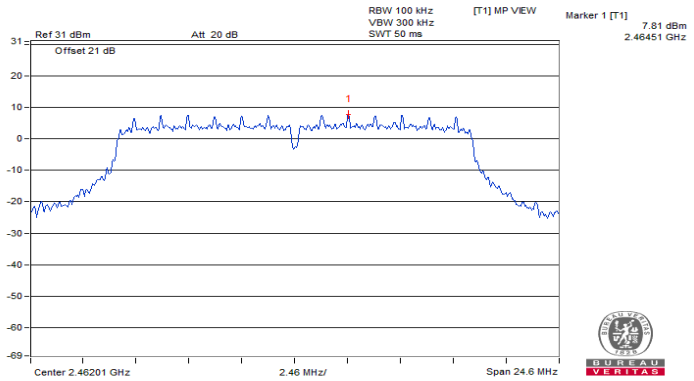
CH 1



CH 6



CH 6



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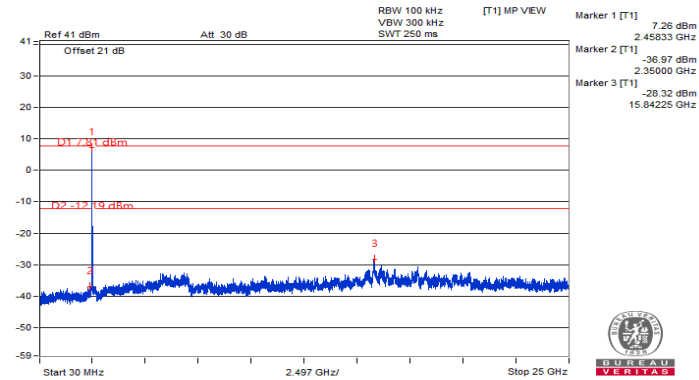

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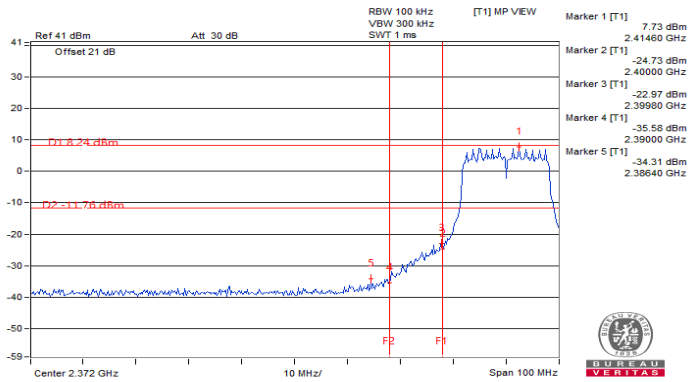
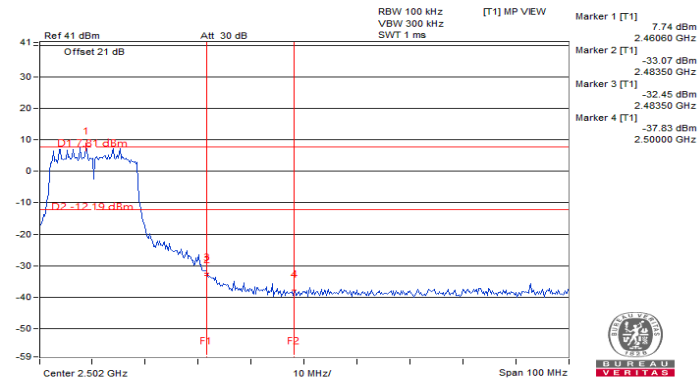
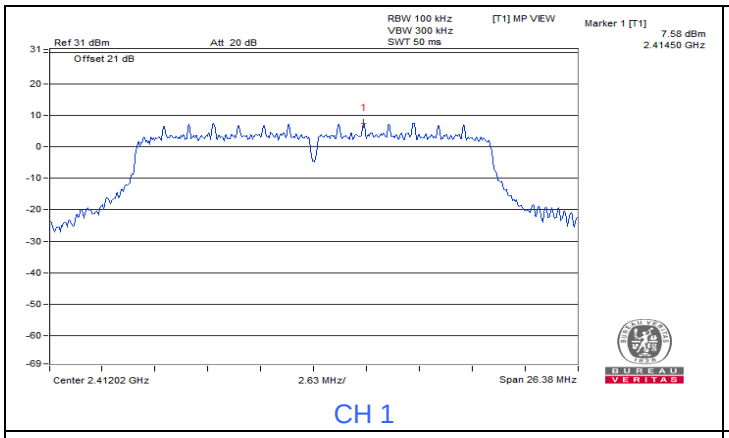


CH 1 Band edge

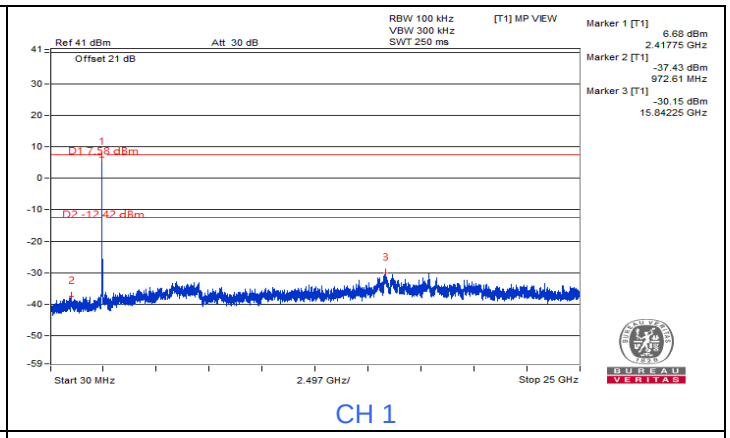


CH 11 Band edge

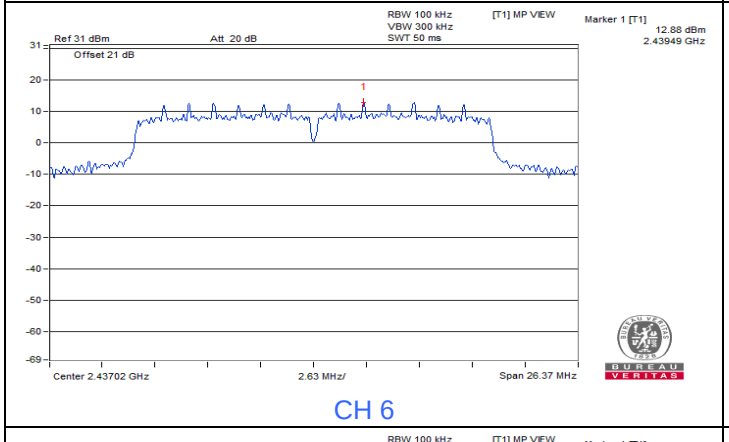
802.11n (HT20)



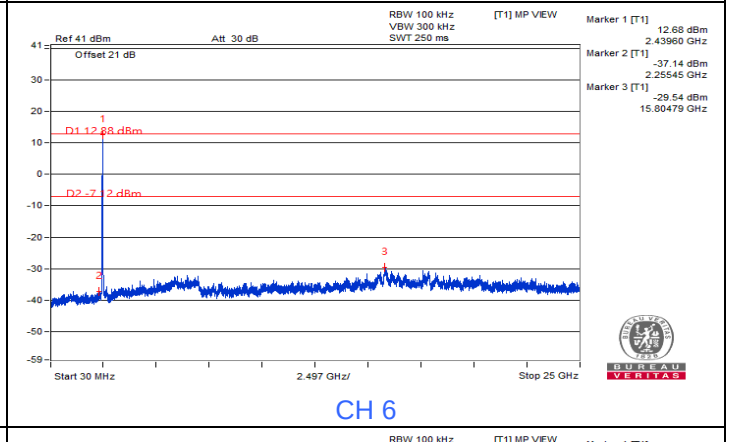
CH 1



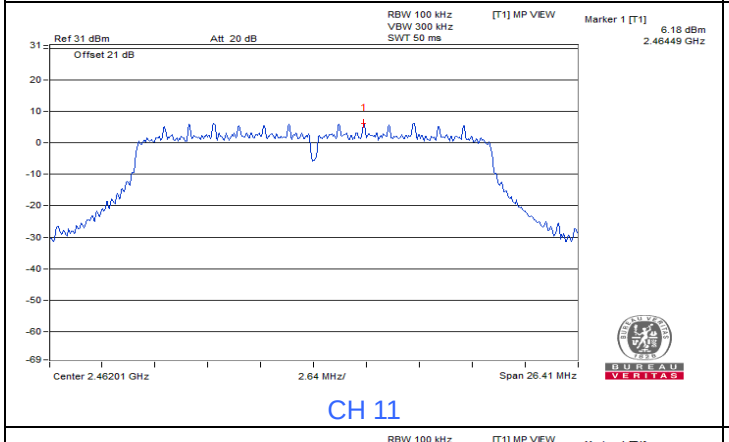
CH 1



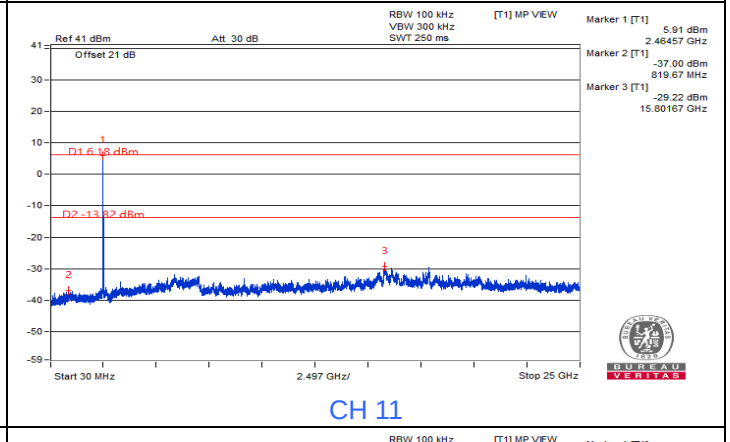
CH 6



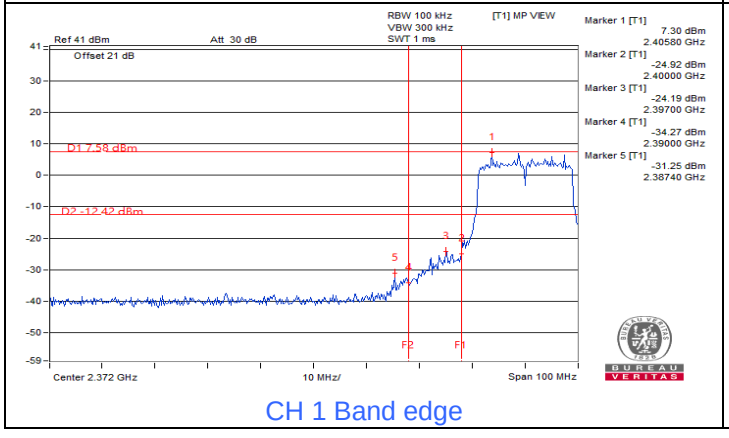
CH 6



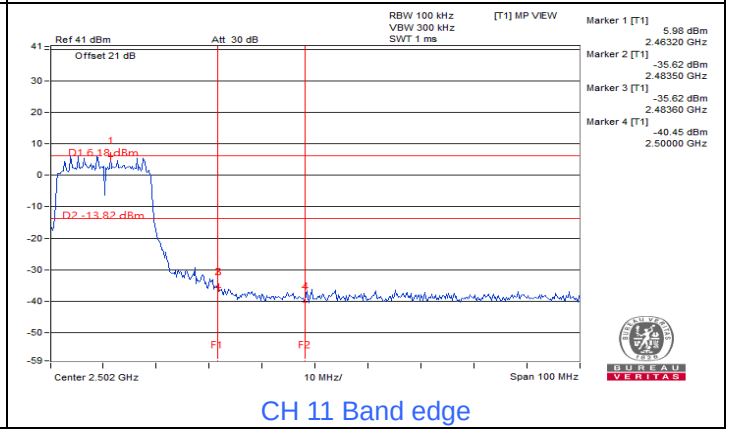
CH 11



CH 11

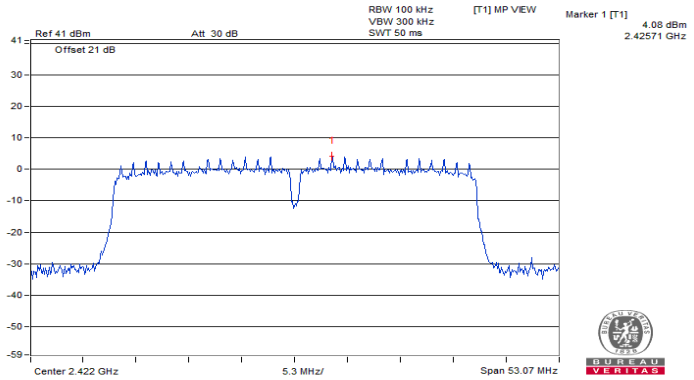


CH 1 Band edge

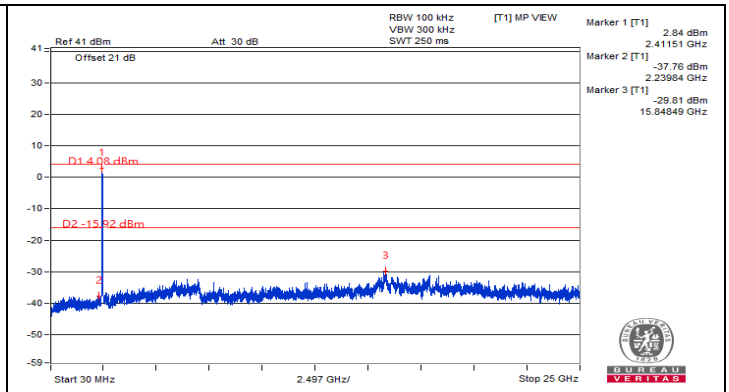


CH 11 Band edge

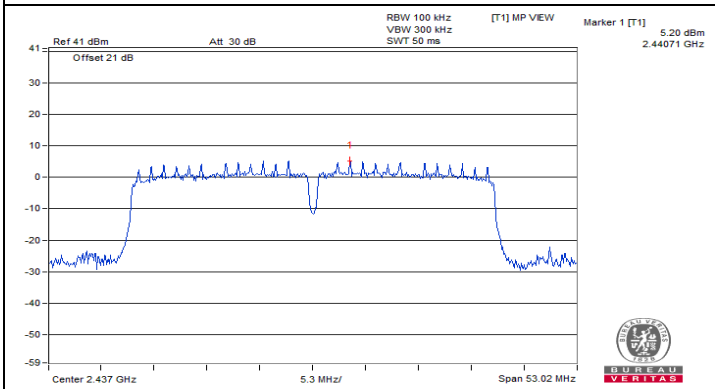
802.11n (HT40)



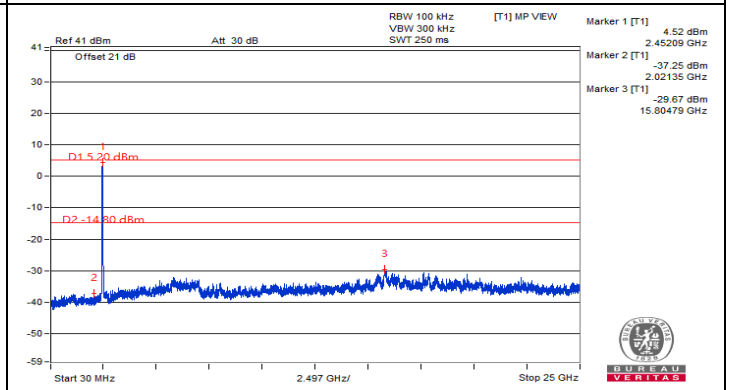
CH 3



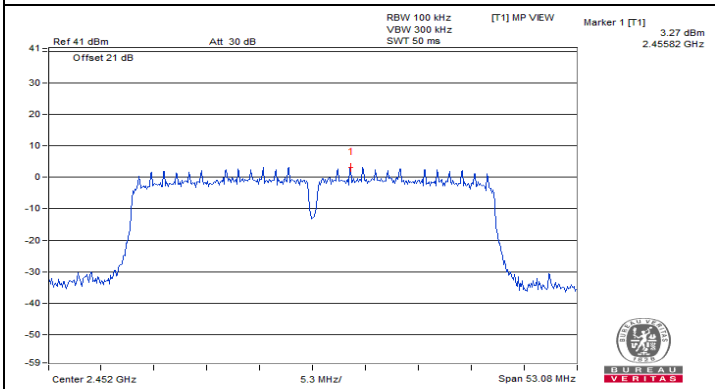
CH 3



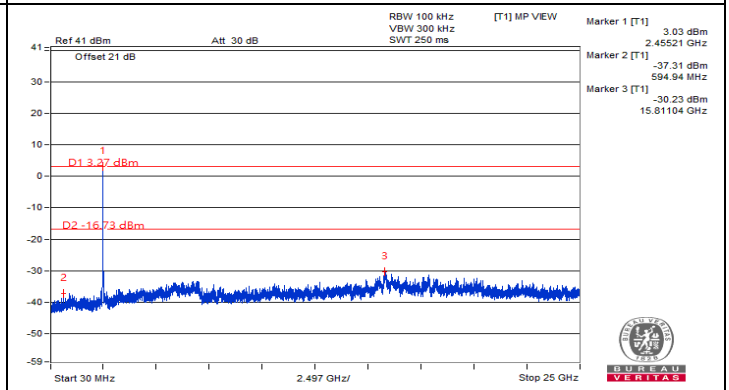
CH 6



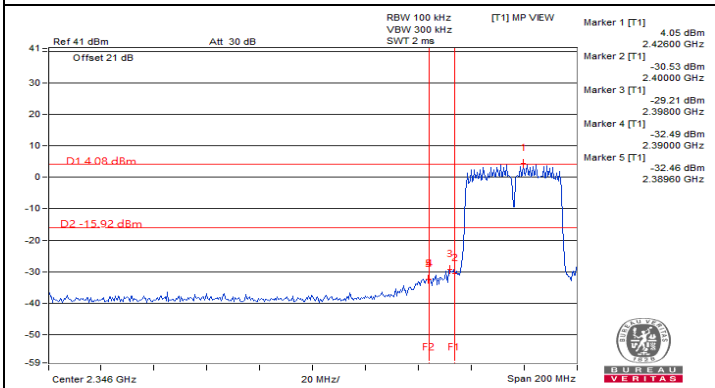
CH 6



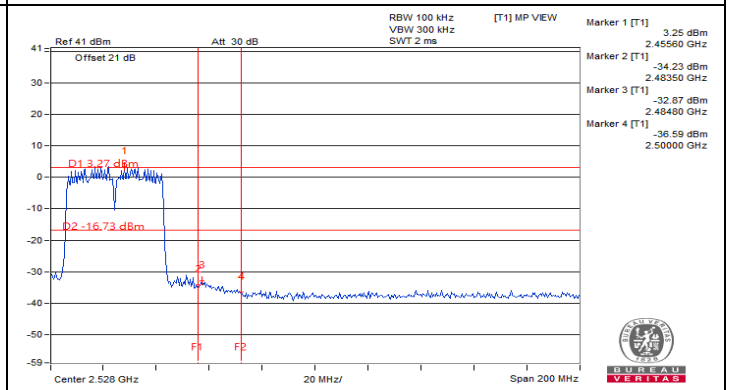
CH 9



CH 9



CH 3 Band edge



CH 9 Band edge

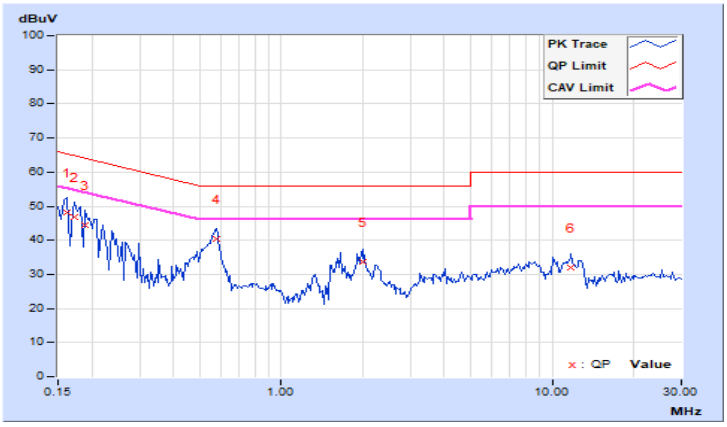
7.5 AC Power Conducted Emissions

RF Mode	802.11n (HT20)	**Channel**	CH 6：2437 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**	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	0.16168	9.94	38.08	20.31	48.02	30.25	65.38	55.38	-17.36	-25.13
2	0.17345	9.94	36.75	20.86	46.69	30.80	64.79	54.79	-18.10	-23.99
3	0.18912	9.94	34.64	16.92	44.58	26.86	64.08	54.08	-19.50	-27.22
4	**0.57585**	**9.96**	**30.47**	**22.15**	**40.43**	**32.11**	**56.00**	**46.00**	**-15.57**	**-13.89**
5	2.01557	10.07	23.75	14.14	33.82	24.21	56.00	46.00	-22.18	-21.79
6	11.76170	10.79	21.29	17.98	32.08	28.77	60.00	50.00	-27.92	-21.23

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

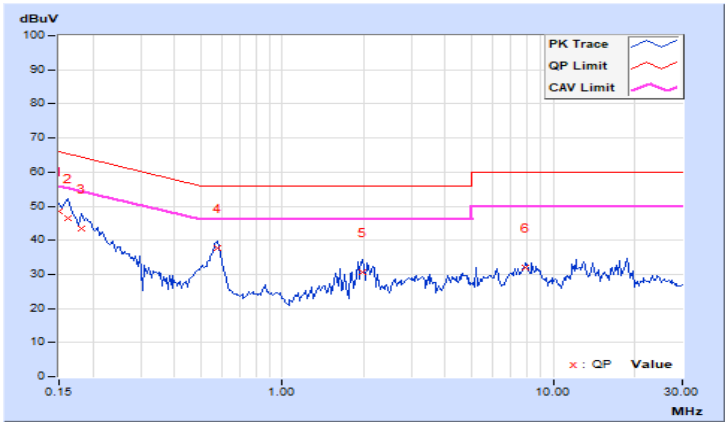


RF Mode	802.11n (HT20)	**Channel**	CH 6：2437 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Ryan Du		

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	10.00	38.63	23.42	48.63	33.42	66.00	56.00	-17.37	-22.58
2	0.16175	10.00	36.52	19.29	46.52	29.29	65.37	55.37	-18.85	-26.08
3	0.18131	10.00	33.46	18.74	43.46	28.74	64.43	54.43	-20.97	-25.69
4	0.57977	10.02	27.75	19.52	37.77	29.54	56.00	46.00	-18.23	-16.46
5	1.98043	10.12	20.51	6.46	30.63	16.58	56.00	46.00	-25.37	-29.42
6	7.87506	10.51	21.57	10.71	32.08	21.22	60.00	50.00	-27.92	-28.78

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



7.6 Unwanted Emissions below 1 GHz

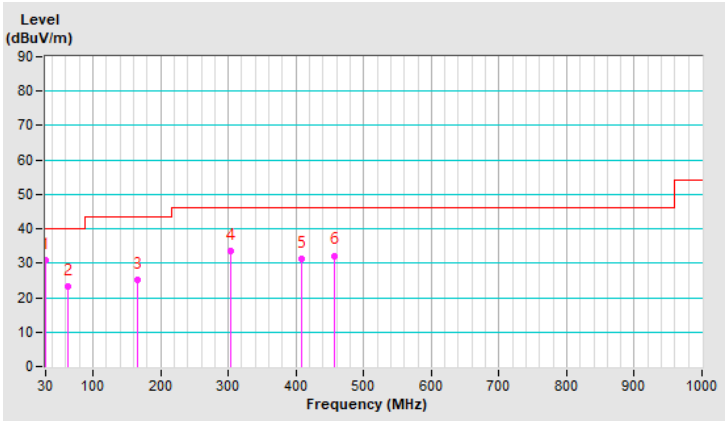
Mode A

RF Mode	802.11n (HT20)	**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**	20°C, 70% 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	30.21	30.8 QP	40.0	-9.2	1.00 H	315	44.6	-13.8
2	62.29	23.1 QP	40.0	-16.9	1.50 H	286	36.4	-13.3
3	166.35	25.1 QP	43.5	-18.4	1.00 H	42	37.9	-12.8
4	303.52	33.5 QP	46.0	-12.5	1.50 H	289	45.6	-12.1
5	408.03	31.2 QP	46.0	-14.8	1.00 H	37	40.8	-9.6
6	456.02	32.2 QP	46.0	-13.8	1.00 H	25	40.2	-8.0

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.

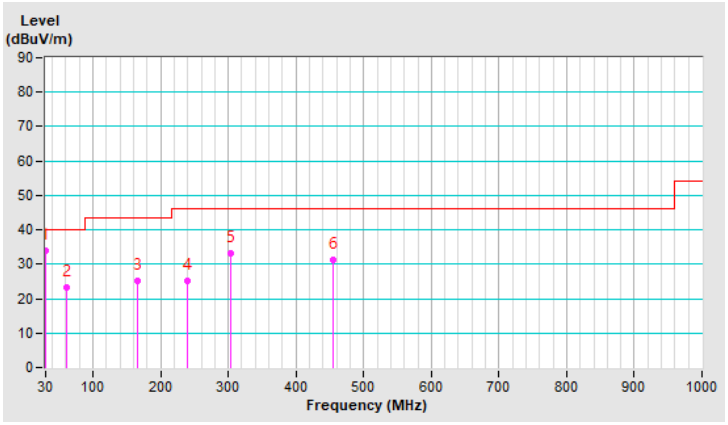


RF Mode	802.11n (HT20)	**Channel**	CH 6：2437 MHz
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	(QP) RB = 120kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Ryan DU		

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	30.18	34.0 QP	40.0	-6.0	1.00 V	168	47.8	-13.8
2	61.15	23.2 QP	40.0	-16.8	1.00 V	339	36.5	-13.3
3	166.36	25.1 QP	43.5	-18.4	1.00 V	47	37.9	-12.8
4	240.03	25.1 QP	46.0	-20.9	1.00 V	281	39.4	-14.3
5	303.06	33.2 QP	46.0	-12.8	1.00 V	63	45.3	-12.1
6	455.83	31.1 QP	46.0	-14.9	1.00 V	85	39.1	-8.0

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.



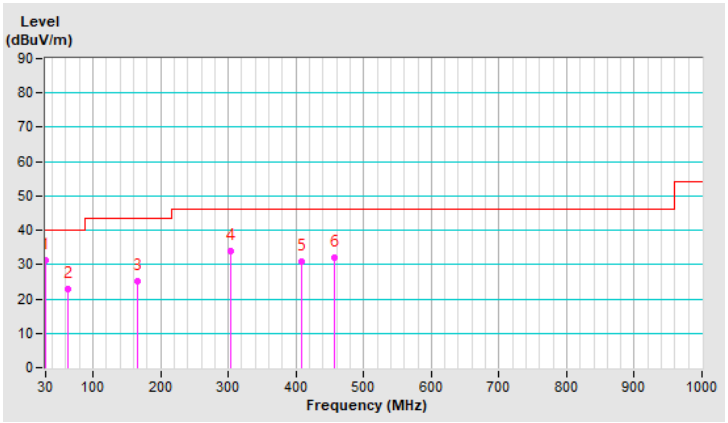
Mode B

RF Mode	802.11n (HT20)	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	20°C, 70% 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	30.08	31.4 QP	40.0	-8.6	1.00 H	360	45.2	-13.8
2	62.23	22.7 QP	40.0	-17.3	1.50 H	243	36.0	-13.3
3	166.36	25.0 QP	43.5	-18.5	1.00 H	66	37.8	-12.8
4	303.42	34.0 QP	46.0	-12.0	1.50 H	256	46.1	-12.1
5	408.01	31.0 QP	46.0	-15.0	1.00 H	73	40.6	-9.6
6	456.02	32.0 QP	46.0	-14.0	1.00 H	47	40.0	-8.0

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.

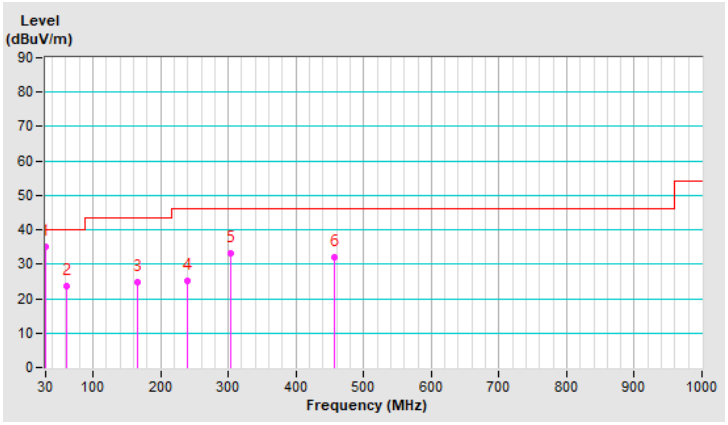


RF Mode	802.11n (HT20)	**Channel**	CH 6：2437 MHz
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	(QP) RB = 120kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Ryan DU		

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	**30.02**	**34.9 QP**	**40.0**	**-5.1**	**1.00 V**	**114**	**48.7**	**-13.8**
2	61.09	23.5 QP	40.0	-16.5	1.00 V	342	36.7	-13.2
3	166.31	24.9 QP	43.5	-18.6	1.00 V	94	37.8	-12.9
4	240.00	25.3 QP	46.0	-20.7	1.00 V	257	39.6	-14.3
5	302.91	33.1 QP	46.0	-12.9	1.00 V	66	45.2	-12.1
6	455.95	31.9 QP	46.0	-14.1	1.00 V	80	39.9	-8.0

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

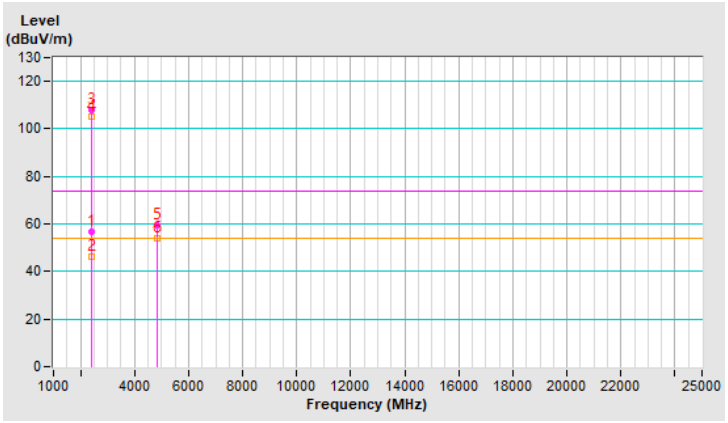
Mode A

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 = 10 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	2387.24	56.5 PK	74.0	-17.5	2.17 H	44	57.5	-1.0
2	2387.24	46.0 AV	54.0	-8.0	2.17 H	44	47.0	-1.0
3	*2412.00	107.7 PK			2.17 H	44	108.7	-1.0
4	*2412.00	105.2 AV			2.17 H	44	106.2	-1.0
5	4824.00	59.3 PK	74.0	-14.7	1.98 H	348	55.0	4.3
6	**4824.00**	**53.9 AV**	**54.0**	**-0.1**	**1.98 H**	**348**	**49.6**	**4.3**

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.

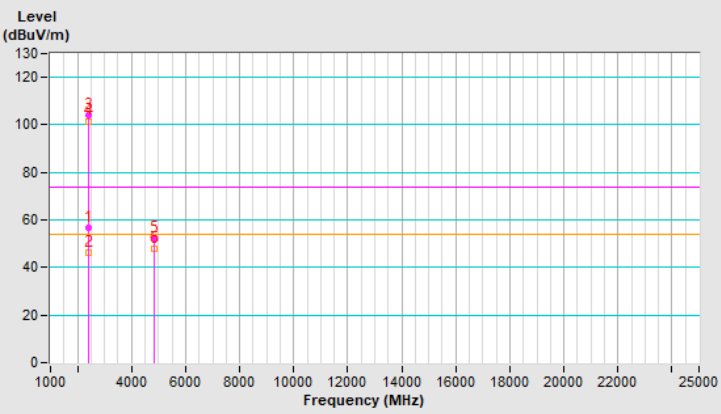


RF Mode	802.11b	**Channel**	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	2387.24	56.9 PK	74.0	-17.1	3.89 V	92	57.9	-1.0
2	2387.24	46.0 AV	54.0	-8.0	3.89 V	92	47.0	-1.0
3	*2412.00	103.9 PK			3.89 V	92	104.9	-1.0
4	*2412.00	101.6 AV			3.89 V	92	102.6	-1.0
5	4824.00	52.1 PK	74.0	-21.9	2.95 V	206	47.8	4.3
6	4824.00	48.1 AV	54.0	-5.9	2.95 V	206	43.8	4.3

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.

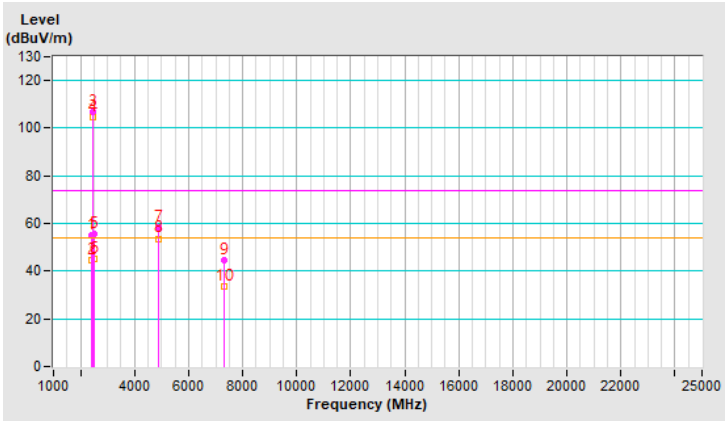


RF Mode	802.11b	Channel	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	55.3 PK	74.0	-18.7	2.21 H	37	56.3	-1.0
2	2390.00	44.7 AV	54.0	-9.3	2.21 H	37	45.7	-1.0
3	*2437.00	106.8 PK			2.21 H	37	107.7	-0.9
4	*2437.00	104.4 AV			2.21 H	37	105.3	-0.9
5	2483.50	55.7 PK	74.0	-18.3	2.21 H	37	56.6	-0.9
6	2483.50	45.0 AV	54.0	-9.0	2.21 H	37	45.9	-0.9
7	4874.00	58.2 PK	74.0	-15.8	2.08 H	346	53.9	4.3
8	4874.00	53.7 AV	54.0	-0.3	2.08 H	346	49.4	4.3
9	7311.00	44.4 PK	74.0	-29.6	1.71 H	329	34.1	10.3
10	7311.00	33.6 AV	54.0	-20.4	1.71 H	329	23.3	10.3

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.

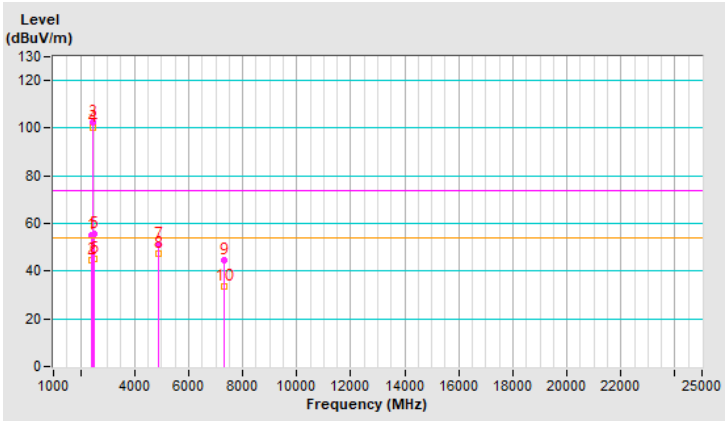


RF Mode	802.11b	**Channel**	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	55.2 PK	74.0	-18.8	3.95 V	117	56.2	-1.0
2	2390.00	44.6 AV	54.0	-9.4	3.95 V	117	45.6	-1.0
3	*2437.00	102.4 PK			3.95 V	117	103.3	-0.9
4	*2437.00	100.1 AV			3.95 V	117	101.0	-0.9
5	2483.50	55.7 PK	74.0	-18.3	3.95 V	117	56.6	-0.9
6	2483.50	44.9 AV	54.0	-9.1	3.95 V	117	45.8	-0.9
7	4874.00	51.3 PK	74.0	-22.7	3.01 V	227	47.0	4.3
8	4874.00	47.5 AV	54.0	-6.5	3.01 V	227	43.2	4.3
9	7311.00	44.8 PK	74.0	-29.2	1.62 V	215	34.5	10.3
10	7311.00	33.7 AV	54.0	-20.3	1.62 V	215	23.4	10.3

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.

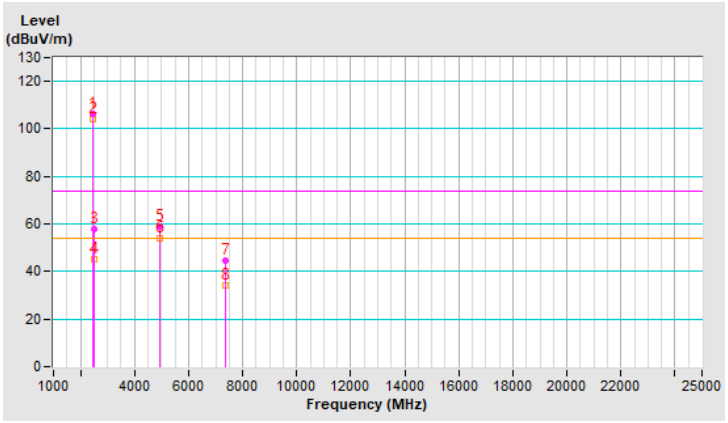


RF Mode	802.11b	Channel	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	106.5 PK			2.32 H	31	107.4	-0.9
2	*2462.00	104.1 AV			2.32 H	31	105.0	-0.9
3	2483.50	57.7 PK	74.0	-16.3	2.32 H	31	58.6	-0.9
4	2483.50	45.3 AV	54.0	-8.7	2.32 H	31	46.2	-0.9
5	4924.00	59.1 PK	74.0	-14.9	2.17 H	346	54.6	4.5
6	4924.00	53.8 AV	54.0	-0.2	2.17 H	346	49.3	4.5
7	7386.00	44.8 PK	74.0	-29.2	1.67 H	333	34.6	10.2
8	7386.00	34.0 AV	54.0	-20.0	1.67 H	333	23.8	10.2

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

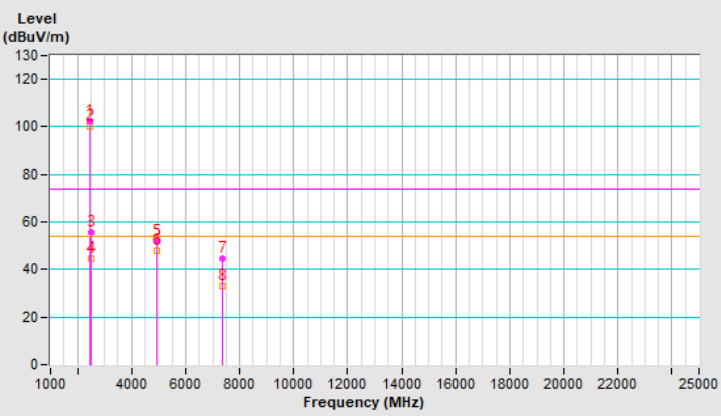


RF Mode	802.11b	Channel	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	102.6 PK			3.93 V	104	103.5	-0.9
2	*2462.00	100.3 AV			3.93 V	104	101.2	-0.9
3	2483.50	55.7 PK	74.0	-18.3	3.93 V	104	56.6	-0.9
4	2483.50	44.7 AV	54.0	-9.3	3.93 V	104	45.6	-0.9
5	4924.00	51.6 PK	74.0	-22.4	2.99 V	215	47.1	4.5
6	4924.00	47.8 AV	54.0	-6.2	2.99 V	215	43.3	4.5
7	7386.00	44.4 PK	74.0	-29.6	1.58 V	229	34.2	10.2
8	7386.00	33.2 AV	54.0	-20.8	1.58 V	229	23.0	10.2

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

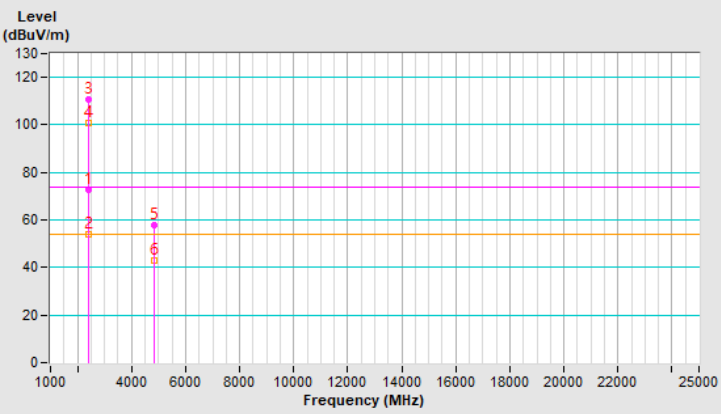


RF Mode	802.11g	**Channel**	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 510 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	72.7 PK	74.0	-1.3	2.19 H	42	73.7	-1.0
2	2390.00	53.8 AV	54.0	-0.2	2.19 H	42	54.8	-1.0
3	*2412.00	110.6 PK			2.19 H	42	111.6	-1.0
4	*2412.00	100.9 AV			2.19 H	42	101.9	-1.0
5	4824.00	57.7 PK	74.0	-16.3	1.50 H	30	53.4	4.3
6	4824.00	43.0 AV	54.0	-11.0	1.50 H	30	38.7	4.3

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.

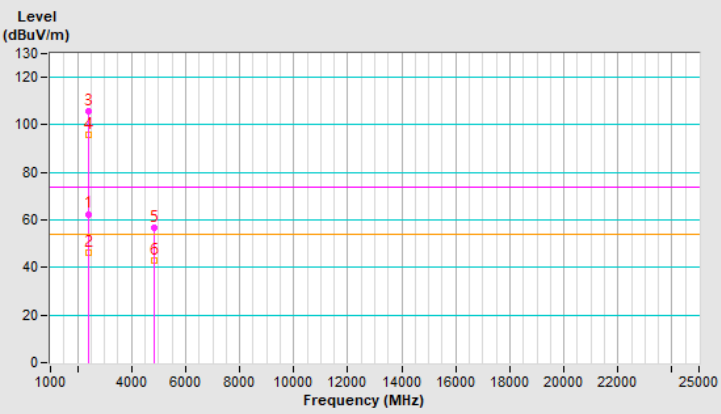


RF Mode	802.11g	**Channel**	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 510 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	62.5 PK	74.0	-11.5	3.82 V	99	63.5	-1.0
2	2390.00	46.3 AV	54.0	-7.7	3.82 V	99	47.3	-1.0
3	*2412.00	105.9 PK			3.82 V	99	106.9	-1.0
4	*2412.00	95.7 AV			3.82 V	99	96.7	-1.0
5	4824.00	56.5 PK	74.0	-17.5	1.27 V	64	52.2	4.3
6	4824.00	42.9 AV	54.0	-11.1	1.27 V	64	38.6	4.3

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.

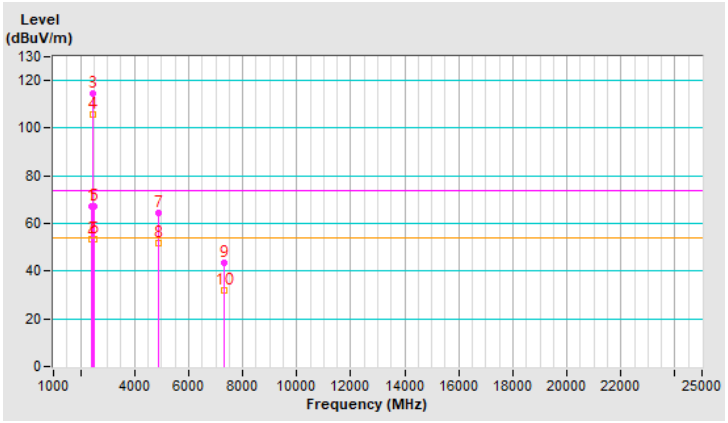


RF Mode	802.11g	Channel	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 510 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	67.4 PK	74.0	-6.6	2.17 H	44	68.4	-1.0
2	2390.00	53.6 AV	54.0	-0.4	2.17 H	44	54.6	-1.0
3	*2437.00	114.7 PK			2.17 H	44	115.6	-0.9
4	*2437.00	105.7 AV			2.17 H	44	106.6	-0.9
5	2483.50	67.3 PK	74.0	-6.7	2.17 H	44	68.2	-0.9
6	2483.50	53.2 AV	54.0	-0.8	2.17 H	44	54.1	-0.9
7	4874.00	64.2 PK	74.0	-9.8	1.39 H	23	59.9	4.3
8	4874.00	51.9 AV	54.0	-2.1	1.39 H	23	47.6	4.3
9	7311.00	43.4 PK	74.0	-30.6	1.37 H	33	33.1	10.3
10	7311.00	32.0 AV	54.0	-22.0	1.37 H	33	21.7	10.3

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.

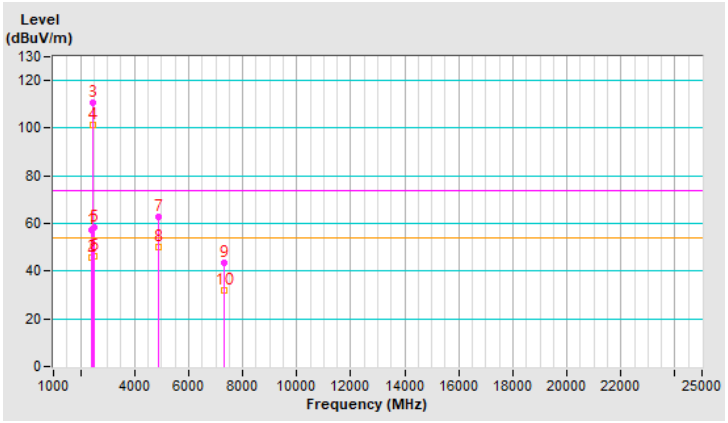


RF Mode	802.11g	Channel	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 510 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	57.5 PK	74.0	-16.5	3.94 V	101	58.5	-1.0
2	2390.00	45.5 AV	54.0	-8.5	3.94 V	101	46.5	-1.0
3	*2437.00	110.9 PK			3.94 V	101	111.8	-0.9
4	*2437.00	101.4 AV			3.94 V	101	102.3	-0.9
5	2483.50	58.3 PK	74.0	-15.7	3.94 V	101	59.2	-0.9
6	2483.50	46.2 AV	54.0	-7.8	3.94 V	101	47.1	-0.9
7	4874.00	63.0 PK	74.0	-11.0	1.32 V	65	58.7	4.3
8	4874.00	50.1 AV	54.0	-3.9	1.32 V	65	45.8	4.3
9	7311.00	43.4 PK	74.0	-30.6	1.49 V	75	33.1	10.3
10	7311.00	31.8 AV	54.0	-22.2	1.49 V	75	21.5	10.3

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.

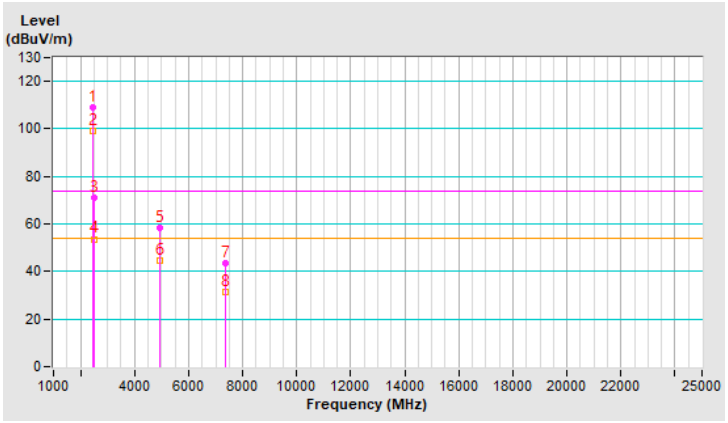


RF Mode	802.11g	Channel	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 510 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	109.3 PK			2.06 H	45	110.2	-0.9
2	*2462.00	99.3 AV			2.06 H	45	100.2	-0.9
3	2483.50	71.1 PK	74.0	-2.9	2.06 H	45	72.0	-0.9
4	2483.50	53.7 AV	54.0	-0.3	2.06 H	45	54.6	-0.9
5	4924.00	58.3 PK	74.0	-15.7	1.50 H	35	53.8	4.5
6	4924.00	44.8 AV	54.0	-9.2	1.50 H	35	40.3	4.5
7	7386.00	43.5 PK	74.0	-30.5	1.61 H	25	33.3	10.2
8	7386.00	31.3 AV	54.0	-22.7	1.61 H	25	21.1	10.2

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

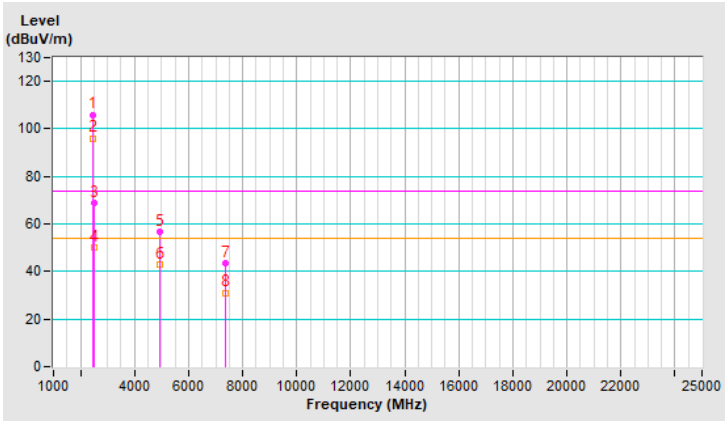


RF Mode	802.11g	Channel	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 510 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	106.0 PK			3.96 V	113	106.9	-0.9
2	*2462.00	96.1 AV			3.96 V	113	97.0	-0.9
3	2483.50	68.7 PK	74.0	-5.3	3.96 V	113	69.6	-0.9
4	2483.50	49.9 AV	54.0	-4.1	3.96 V	113	50.8	-0.9
5	4924.00	56.5 PK	74.0	-17.5	1.25 V	78	52.0	4.5
6	4924.00	42.8 AV	54.0	-11.2	1.25 V	78	38.3	4.5
7	7386.00	43.6 PK	74.0	-30.4	1.42 V	93	33.4	10.2
8	7386.00	31.1 AV	54.0	-22.9	1.42 V	93	20.9	10.2

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

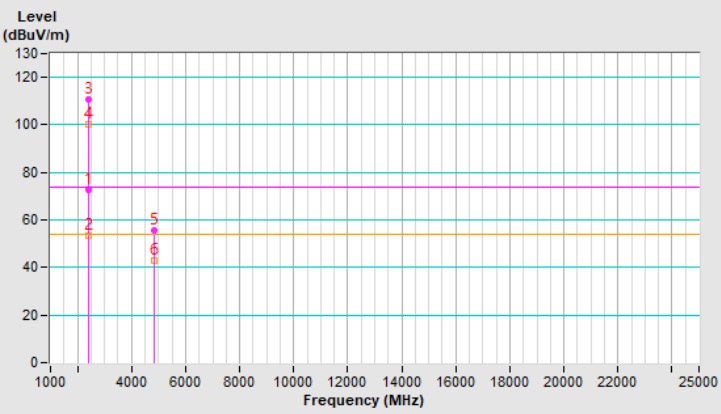


RF Mode	802.11n (HT20)	**Channel**	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	72.6 PK	74.0	-1.4	2.26 H	36	73.6	-1.0
2	2390.00	53.6 AV	54.0	-0.4	2.26 H	36	54.6	-1.0
3	*2412.00	110.5 PK			2.26 H	36	111.5	-1.0
4	*2412.00	100.4 AV			2.26 H	36	101.4	-1.0
5	4824.00	55.7 PK	74.0	-18.3	1.67 H	29	51.4	4.3
6	4824.00	42.8 AV	54.0	-11.2	1.67 H	29	38.5	4.3

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.

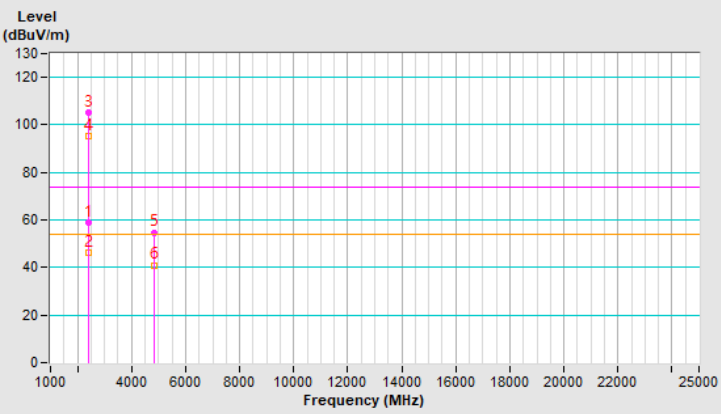


RF Mode	802.11n (HT20)	**Channel**	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	59.0 PK	74.0	-15.0	3.34 V	97	60.0	-1.0
2	2390.00	46.0 AV	54.0	-8.0	3.34 V	97	47.0	-1.0
3	*2412.00	105.4 PK			3.34 V	97	106.4	-1.0
4	*2412.00	95.2 AV			3.34 V	97	96.2	-1.0
5	4824.00	54.8 PK	74.0	-19.2	1.29 V	87	50.5	4.3
6	4824.00	41.0 AV	54.0	-13.0	1.29 V	87	36.7	4.3

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.

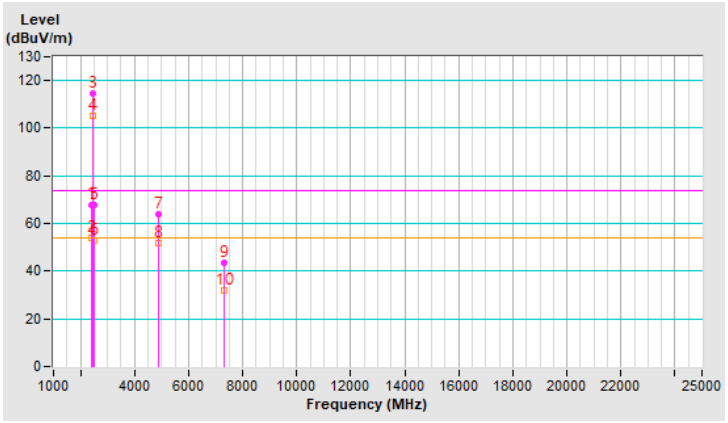


RF Mode	802.11n (HT20)	**Channel**	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	68.0 PK	74.0	-6.0	2.17 H	41	69.0	-1.0
2	**2390.00**	**53.9 AV**	**54.0**	**-0.1**	**2.17 H**	**41**	**54.9**	**-1.0**
3	*2437.00	114.8 PK			2.17 H	41	115.7	-0.9
4	*2437.00	105.4 AV			2.17 H	41	106.3	-0.9
5	2483.50	67.7 PK	74.0	-6.3	2.17 H	41	68.6	-0.9
6	2483.50	53.1 AV	54.0	-0.9	2.17 H	41	54.0	-0.9
7	4874.00	64.1 PK	74.0	-9.9	1.46 H	28	59.8	4.3
8	4874.00	51.7 AV	54.0	-2.3	1.46 H	28	47.4	4.3
9	7311.00	43.3 PK	74.0	-30.7	1.54 H	9	33.0	10.3
10	7311.00	31.7 AV	54.0	-22.3	1.54 H	9	21.4	10.3

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.

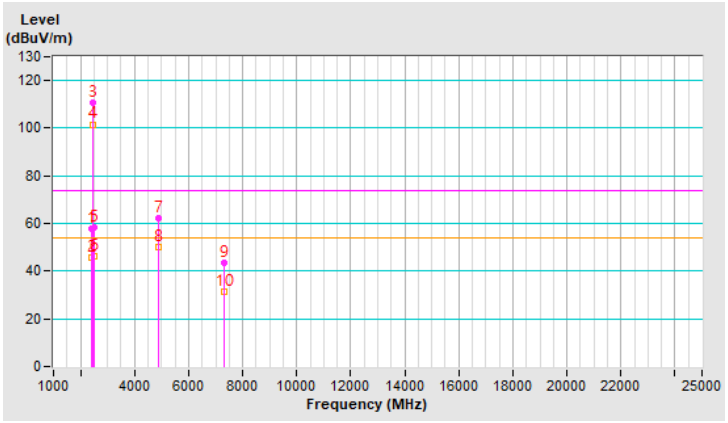


RF Mode	802.11n (HT20)	Channel	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	57.6 PK	74.0	-16.4	3.34 V	91	58.6	-1.0
2	2390.00	45.8 AV	54.0	-8.2	3.34 V	91	46.8	-1.0
3	*2437.00	110.9 PK			3.34 V	91	111.8	-0.9
4	*2437.00	101.6 AV			3.34 V	91	102.5	-0.9
5	2483.50	58.5 PK	74.0	-15.5	3.34 V	91	59.4	-0.9
6	2483.50	46.2 AV	54.0	-7.8	3.34 V	91	47.1	-0.9
7	4874.00	62.3 PK	74.0	-11.7	1.38 V	86	58.0	4.3
8	4874.00	50.1 AV	54.0	-3.9	1.38 V	86	45.8	4.3
9	7311.00	43.5 PK	74.0	-30.5	1.41 V	55	33.2	10.3
10	7311.00	31.5 AV	54.0	-22.5	1.41 V	55	21.2	10.3

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.

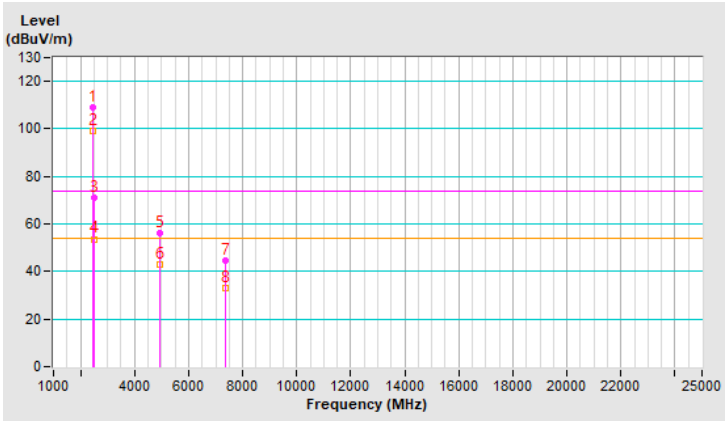


RF Mode	802.11n (HT20)	Channel	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	109.1 PK			2.29 H	30	110.0	-0.9
2	*2462.00	99.1 AV			2.29 H	30	100.0	-0.9
3	2483.50	71.2 PK	74.0	-2.8	2.29 H	30	72.1	-0.9
4	2483.50	53.7 AV	54.0	-0.3	2.29 H	30	54.6	-0.9
5	4924.00	56.1 PK	74.0	-17.9	1.65 H	15	51.6	4.5
6	4924.00	43.0 AV	54.0	-11.0	1.65 H	15	38.5	4.5
7	7386.00	44.7 PK	74.0	-29.3	1.56 H	20	34.5	10.2
8	7386.00	32.9 AV	54.0	-21.1	1.56 H	20	22.7	10.2

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

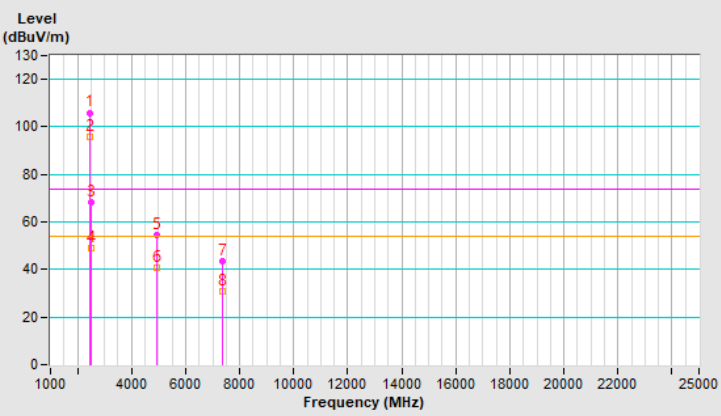


RF Mode	802.11n (HT20)	Channel	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	106.0 PK			3.96 V	116	106.9	-0.9
2	*2462.00	95.7 AV			3.96 V	116	96.6	-0.9
3	2483.50	68.5 PK	74.0	-5.5	3.96 V	116	69.4	-0.9
4	2483.50	48.9 AV	54.0	-5.1	3.96 V	116	49.8	-0.9
5	4924.00	54.4 PK	74.0	-19.6	1.34 V	83	49.9	4.5
6	4924.00	40.9 AV	54.0	-13.1	1.34 V	83	36.4	4.5
7	7386.00	43.3 PK	74.0	-30.7	1.49 V	88	33.1	10.2
8	7386.00	30.8 AV	54.0	-23.2	1.49 V	88	20.6	10.2

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

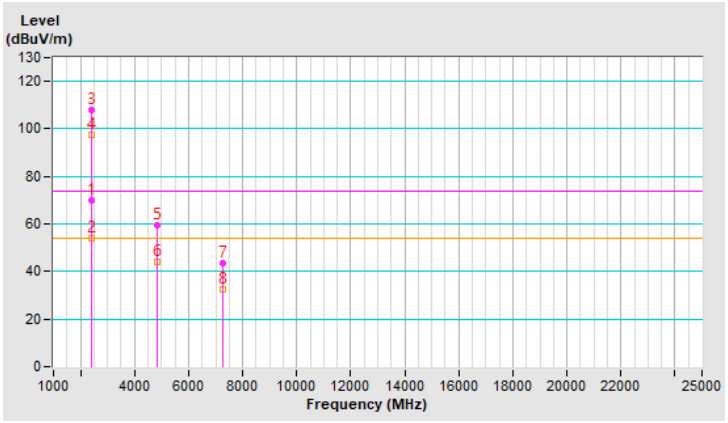


RF Mode	802.11n (HT40)	Channel	CH 3：2422 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 2 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	69.9 PK	74.0	-4.1	2.19 H	35	70.9	-1.0
2	2390.00	53.8 AV	54.0	-0.2	2.19 H	35	54.8	-1.0
3	*2422.00	107.7 PK			2.19 H	35	108.7	-1.0
4	*2422.00	97.6 AV			2.19 H	35	98.6	-1.0
5	4844.00	59.5 PK	74.0	-14.5	1.59 H	23	55.2	4.3
6	4844.00	44.3 AV	54.0	-9.7	1.59 H	23	40.0	4.3
7	7266.00	43.6 PK	74.0	-30.4	1.26 H	16	33.2	10.4
8	7266.00	32.7 AV	54.0	-21.3	1.26 H	16	22.3	10.4

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.

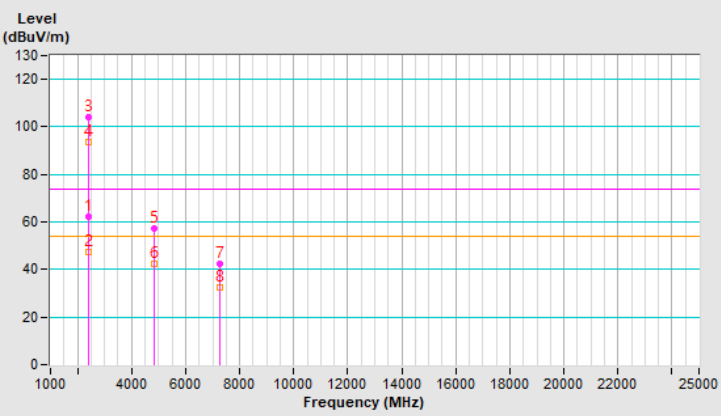


RF Mode	802.11n (HT40)	Channel	CH 3：2422 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 2 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	62.4 PK	74.0	-11.6	3.26 V	128	63.4	-1.0
2	2390.00	47.5 AV	54.0	-6.5	3.26 V	128	48.5	-1.0
3	*2422.00	104.1 PK			3.26 V	128	105.1	-1.0
4	*2422.00	93.5 AV			3.26 V	128	94.5	-1.0
5	4844.00	57.4 PK	74.0	-16.6	1.50 V	81	53.1	4.3
6	4844.00	42.2 AV	54.0	-11.8	1.50 V	81	37.9	4.3
7	7266.00	42.2 PK	74.0	-31.8	1.28 V	80	31.8	10.4
8	7266.00	32.3 AV	54.0	-21.7	1.28 V	80	21.9	10.4

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.

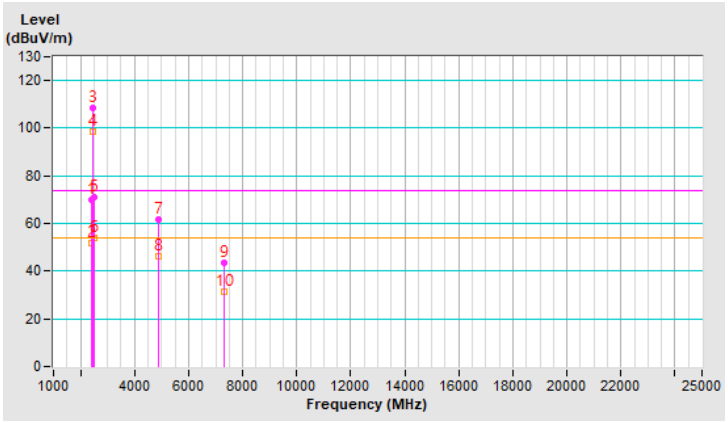


RF Mode	802.11n (HT40)	Channel	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 2 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	69.7 PK	74.0	-4.3	2.18 H	43	70.7	-1.0
2	2390.00	52.0 AV	54.0	-2.0	2.18 H	43	53.0	-1.0
3	*2437.00	108.3 PK			2.18 H	43	109.2	-0.9
4	*2437.00	98.6 AV			2.18 H	43	99.5	-0.9
5	2483.50	71.2 PK	74.0	-2.8	2.18 H	43	72.1	-0.9
6	2483.50	53.8 AV	54.0	-0.2	2.18 H	43	54.7	-0.9
7	4874.00	61.6 PK	74.0	-12.4	1.56 H	15	57.3	4.3
8	4874.00	46.5 AV	54.0	-7.5	1.56 H	15	42.2	4.3
9	7311.00	43.4 PK	74.0	-30.6	1.50 H	33	33.1	10.3
10	7311.00	31.3 AV	54.0	-22.7	1.50 H	33	21.0	10.3

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.

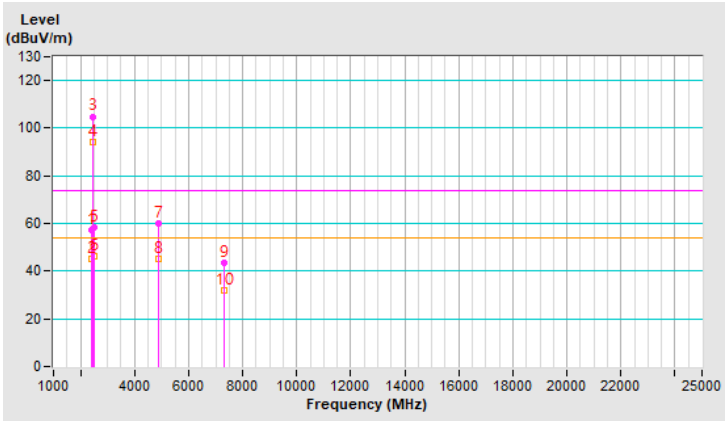


RF Mode	802.11n (HT40)	**Channel**	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 2 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	57.1 PK	74.0	-16.9	3.23 V	140	58.1	-1.0
2	2390.00	45.4 AV	54.0	-8.6	3.23 V	140	46.4	-1.0
3	*2437.00	104.9 PK			3.23 V	140	105.8	-0.9
4	*2437.00	94.1 AV			3.23 V	140	95.0	-0.9
5	2483.50	58.6 PK	74.0	-15.4	3.23 V	140	59.5	-0.9
6	2483.50	46.1 AV	54.0	-7.9	3.23 V	140	47.0	-0.9
7	4874.00	60.1 PK	74.0	-13.9	1.48 V	91	55.8	4.3
8	4874.00	45.1 AV	54.0	-8.9	1.48 V	91	40.8	4.3
9	7311.00	43.7 PK	74.0	-30.3	1.42 V	92	33.4	10.3
10	7311.00	31.9 AV	54.0	-22.1	1.42 V	92	21.6	10.3

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.

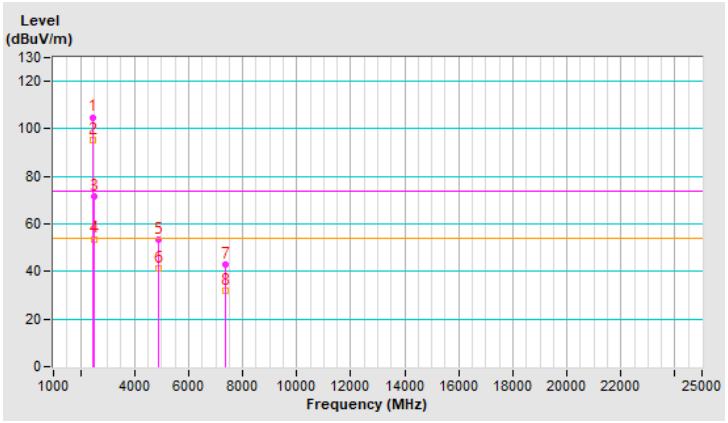


RF Mode	802.11n (HT40)	Channel	CH 9：2452 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 2 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	*2452.00	104.9 PK			2.32 H	46	105.7	-0.8
2	*2452.00	95.4 AV			2.32 H	46	96.2	-0.8
3	2483.50	71.4 PK	74.0	-2.6	2.32 H	46	72.3	-0.9
4	2483.50	53.7 AV	54.0	-0.3	2.32 H	46	54.6	-0.9
5	4904.00	53.5 PK	74.0	-20.5	1.45 H	25	49.1	4.4
6	4904.00	41.3 AV	54.0	-12.7	1.45 H	25	36.9	4.4
7	7356.00	42.9 PK	74.0	-31.1	1.36 H	12	32.6	10.3
8	7356.00	32.0 AV	54.0	-22.0	1.36 H	12	21.7	10.3

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.

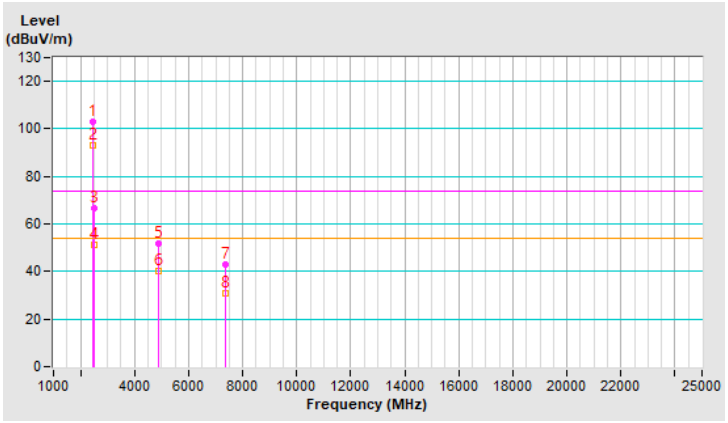


RF Mode	802.11n (HT40)	**Channel**	CH 9：2452 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 2 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	*2452.00	102.8 PK			3.14 V	129	103.6	-0.8
2	*2452.00	93.2 AV			3.14 V	129	94.0	-0.8
3	2483.50	66.6 PK	74.0	-7.4	3.14 V	129	67.5	-0.9
4	2483.50	51.2 AV	54.0	-2.8	3.14 V	129	52.1	-0.9
5	4904.00	52.0 PK	74.0	-22.0	1.33 V	94	47.6	4.4
6	4904.00	40.0 AV	54.0	-14.0	1.33 V	94	35.6	4.4
7	7356.00	42.9 PK	74.0	-31.1	1.70 V	66	32.6	10.3
8	7356.00	30.8 AV	54.0	-23.2	1.70 V	66	20.5	10.3

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.



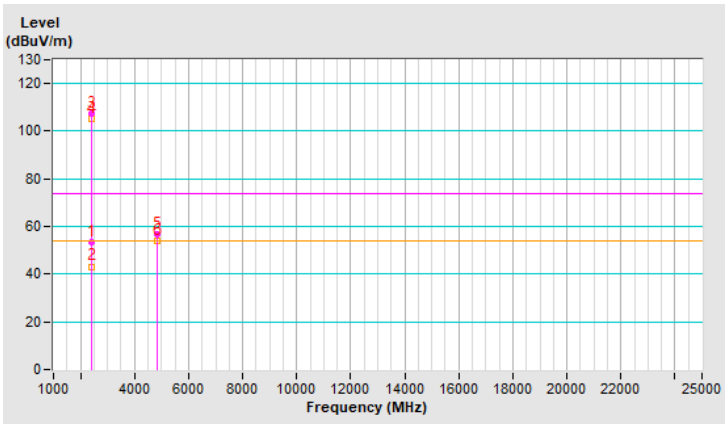
Mode B

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 = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	53.3 PK	74.0	-20.7	1.34 H	20	54.3	-1.0
2	2390.00	43.2 AV	54.0	-10.8	1.34 H	20	44.2	-1.0
3	*2412.00	107.6 PK			1.34 H	20	108.6	-1.0
4	*2412.00	105.2 AV			1.34 H	20	106.2	-1.0
5	4824.00	56.9 PK	74.0	-17.1	1.44 H	20	52.6	4.3
6	4824.00	53.8 AV	54.0	-0.2	1.44 H	20	49.5	4.3

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.

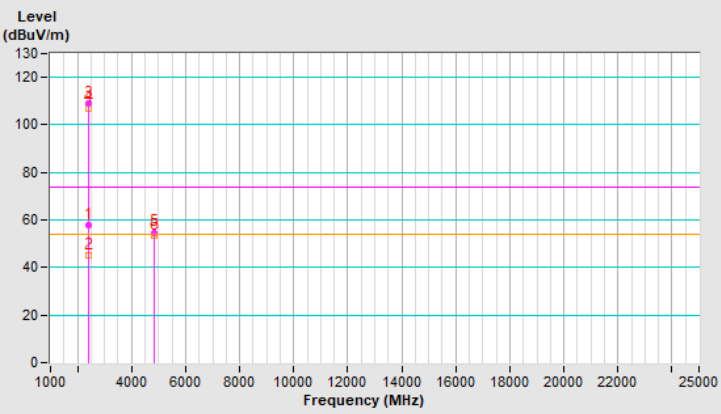


RF Mode	802.11b	**Channel**	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	57.6 PK	74.0	-16.4	1.46 V	83	58.6	-1.0
2	2390.00	45.3 AV	54.0	-8.7	1.46 V	83	46.3	-1.0
3	*2412.00	109.3 PK			1.46 V	83	110.3	-1.0
4	*2412.00	107.1 AV			1.46 V	83	108.1	-1.0
5	4824.00	54.8 PK	74.0	-19.2	1.46 V	148	50.5	4.3
6	4824.00	53.3 AV	54.0	-0.7	1.46 V	148	49.0	4.3

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.

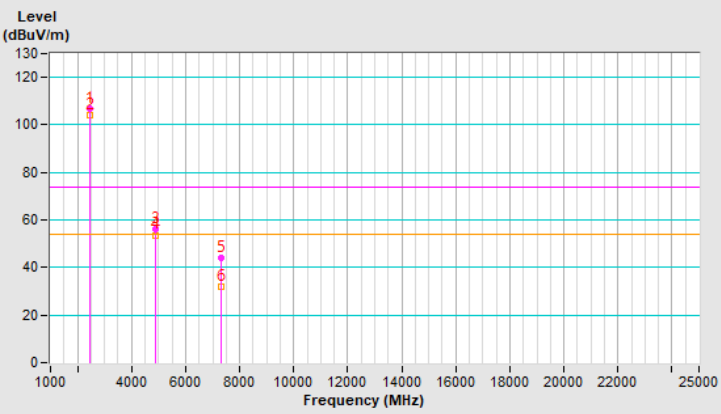


RF Mode	802.11b	**Channel**	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	*2437.00	106.6 PK			1.33 H	20	107.5	-0.9
2	*2437.00	104.3 AV			1.33 H	20	105.2	-0.9
3	4874.00	56.3 PK	74.0	-17.7	1.46 H	20	52.0	4.3
4	4874.00	53.7 AV	54.0	-0.3	1.46 H	20	49.4	4.3
5	7311.00	44.3 PK	74.0	-29.7	1.44 H	20	34.0	10.3
6	7311.00	32.1 AV	54.0	-21.9	1.44 H	20	21.8	10.3

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.

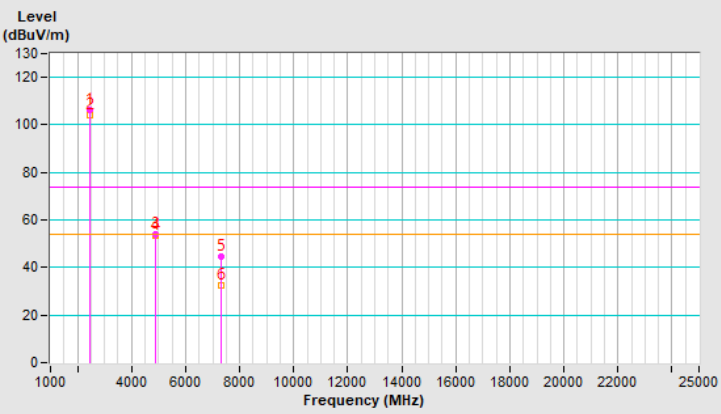


RF Mode	802.11b	**Channel**	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	*2437.00	106.5 PK			1.46 V	83	107.4	-0.9
2	*2437.00	104.2 AV			1.46 V	83	105.1	-0.9
3	4874.00	54.1 PK	74.0	-19.9	1.49 V	80	49.8	4.3
4	4874.00	53.2 AV	54.0	-0.8	1.49 V	80	48.9	4.3
5	7311.00	44.4 PK	74.0	-29.6	1.44 V	77	34.1	10.3
6	7311.00	32.4 AV	54.0	-21.6	1.44 V	77	22.1	10.3

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.

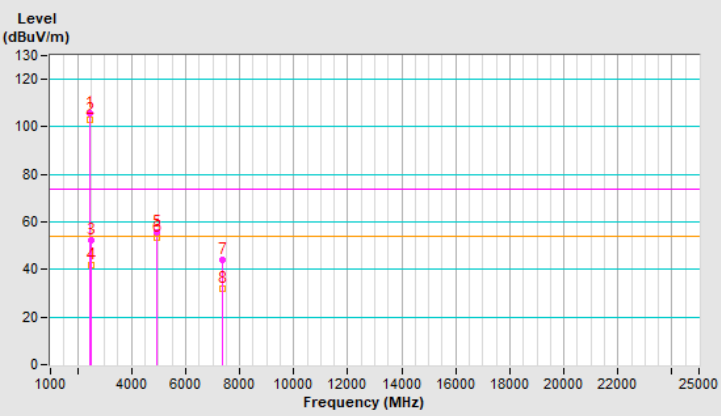


RF Mode	802.11b	Channel	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	105.5 PK			1.26 H	20	106.4	-0.9
2	*2462.00	103.0 AV			1.26 H	20	103.9	-0.9
3	2483.50	52.5 PK	74.0	-21.5	1.26 H	20	53.4	-0.9
4	2483.50	42.0 AV	54.0	-12.0	1.26 H	20	42.9	-0.9
5	4924.00	55.4 PK	74.0	-18.6	1.45 H	20	50.9	4.5
6	4924.00	53.2 AV	54.0	-0.8	1.45 H	20	48.7	4.5
7	7386.00	44.3 PK	74.0	-29.7	1.36 H	20	34.1	10.2
8	7386.00	32.0 AV	54.0	-22.0	1.36 H	20	21.8	10.2

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

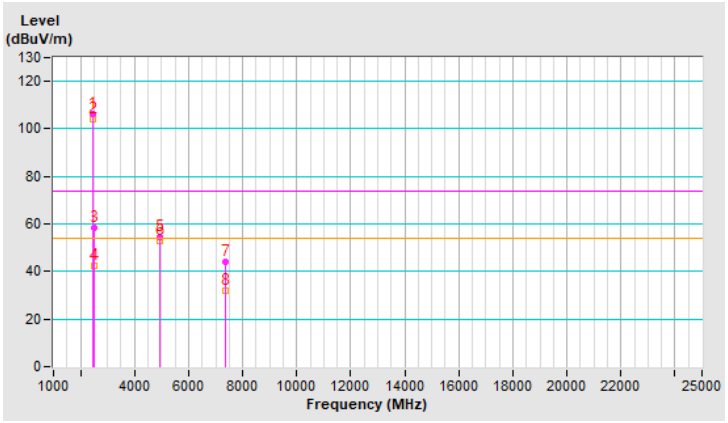


RF Mode	802.11b	Channel	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	106.2 PK			1.46 V	83	107.1	-0.9
2	*2462.00	103.9 AV			1.46 V	83	104.8	-0.9
3	2483.50	58.2 PK	74.0	-15.8	1.46 V	83	59.1	-0.9
4	2483.50	42.5 AV	54.0	-11.5	1.46 V	83	43.4	-0.9
5	4924.00	54.4 PK	74.0	-19.6	1.26 V	79	49.9	4.5
6	4924.00	53.1 AV	54.0	-0.9	1.26 V	79	48.6	4.5
7	7386.00	44.0 PK	74.0	-30.0	1.22 V	80	33.8	10.2
8	7386.00	32.1 AV	54.0	-21.9	1.22 V	80	21.9	10.2

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

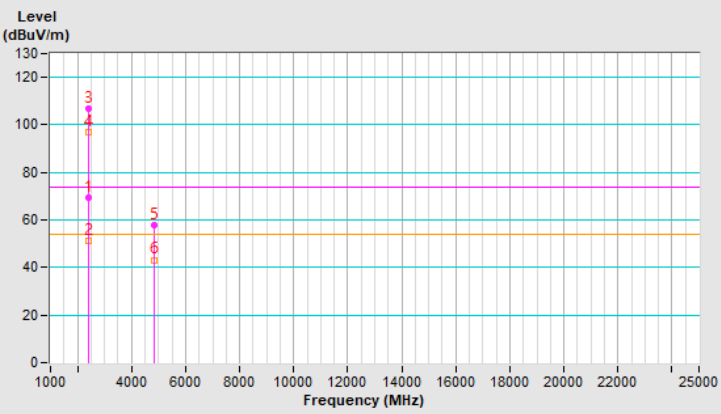


RF Mode	802.11g	**Channel**	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 510 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	69.3 PK	74.0	-4.7	1.47 H	20	70.3	-1.0
2	2390.00	51.4 AV	54.0	-2.6	1.47 H	20	52.4	-1.0
3	*2412.00	106.7 PK			1.47 H	20	107.7	-1.0
4	*2412.00	97.1 AV			1.47 H	20	98.1	-1.0
5	4824.00	57.6 PK	74.0	-16.4	1.51 H	20	53.3	4.3
6	4824.00	43.2 AV	54.0	-10.8	1.51 H	20	38.9	4.3

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.

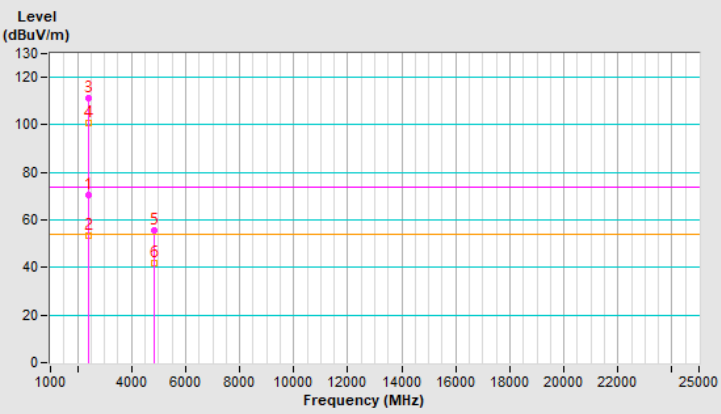


RF Mode	802.11g	**Channel**	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 510 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	70.5 PK	74.0	-3.5	1.45 V	83	71.5	-1.0
2	2390.00	53.3 AV	54.0	-0.7	1.45 V	83	54.3	-1.0
3	*2412.00	111.2 PK			1.45 V	83	112.2	-1.0
4	*2412.00	101.0 AV			1.45 V	83	102.0	-1.0
5	4824.00	55.8 PK	74.0	-18.2	1.37 V	70	51.5	4.3
6	4824.00	41.6 AV	54.0	-12.4	1.37 V	70	37.3	4.3

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.

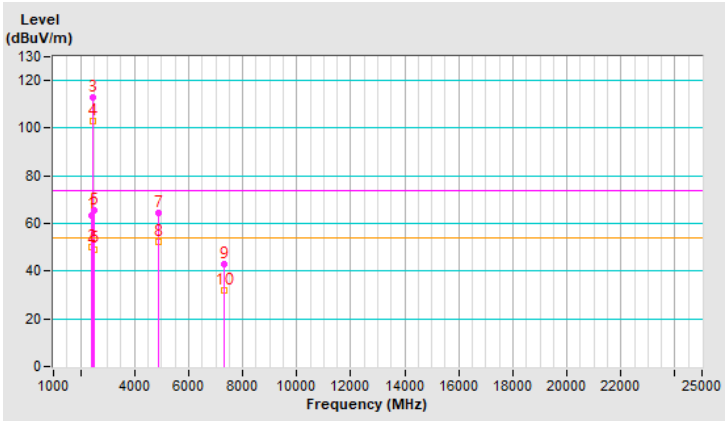


RF Mode	802.11g	Channel	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 510 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	63.6 PK	74.0	-10.4	1.34 H	20	64.6	-1.0
2	2390.00	50.3 AV	54.0	-3.7	1.34 H	20	51.3	-1.0
3	*2437.00	112.8 PK			1.34 H	20	113.7	-0.9
4	*2437.00	103.2 AV			1.34 H	20	104.1	-0.9
5	2483.50	65.7 PK	74.0	-8.3	1.34 H	20	66.6	-0.9
6	2483.50	49.3 AV	54.0	-4.7	1.34 H	20	50.2	-0.9
7	4874.00	64.5 PK	74.0	-9.5	1.43 H	20	60.2	4.3
8	4874.00	52.1 AV	54.0	-1.9	1.43 H	20	47.8	4.3
9	7311.00	43.1 PK	74.0	-30.9	1.33 H	28	32.8	10.3
10	7311.00	31.8 AV	54.0	-22.2	1.33 H	28	21.5	10.3

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.

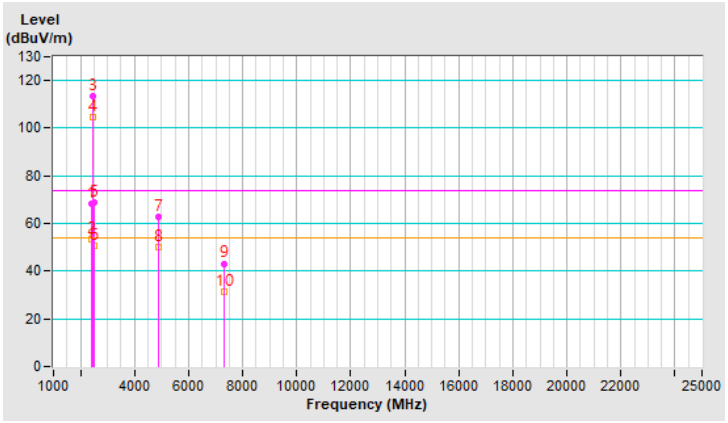


RF Mode	802.11g	**Channel**	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 510 Hz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	68.4 PK	74.0	-5.6	1.52 V	82	69.4	-1.0
2	2390.00	53.4 AV	54.0	-0.6	1.52 V	82	54.4	-1.0
3	*2437.00	113.7 PK			1.52 V	82	114.6	-0.9
4	*2437.00	104.6 AV			1.52 V	82	105.5	-0.9
5	2483.50	68.9 PK	74.0	-5.1	1.52 V	82	69.8	-0.9
6	2483.50	50.5 AV	54.0	-3.5	1.52 V	82	51.4	-0.9
7	4874.00	62.9 PK	74.0	-11.1	1.33 V	80	58.6	4.3
8	4874.00	50.0 AV	54.0	-4.0	1.33 V	80	45.7	4.3
9	7311.00	43.2 PK	74.0	-30.8	1.48 V	67	32.9	10.3
10	7311.00	31.5 AV	54.0	-22.5	1.48 V	67	21.2	10.3

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.

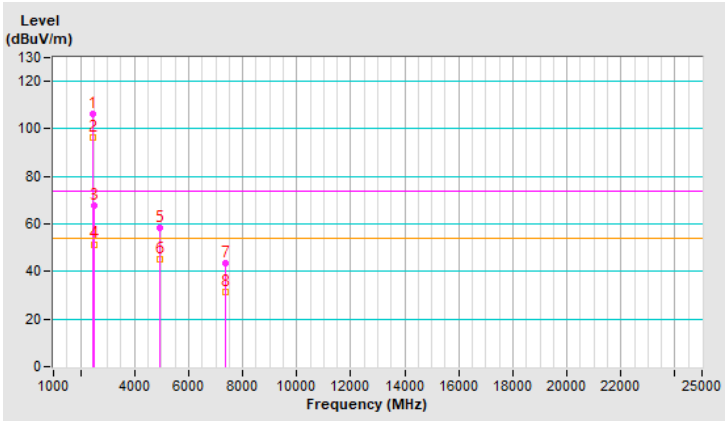


RF Mode	802.11g	Channel	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 510 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	106.5 PK			1.46 H	20	107.4	-0.9
2	*2462.00	96.2 AV			1.46 H	20	97.1	-0.9
3	2483.50	67.5 PK	74.0	-6.5	1.46 H	20	68.4	-0.9
4	2483.50	51.5 AV	54.0	-2.5	1.46 H	20	52.4	-0.9
5	4924.00	58.4 PK	74.0	-15.6	1.52 H	22	53.9	4.5
6	4924.00	45.1 AV	54.0	-8.9	1.52 H	22	40.6	4.5
7	7386.00	43.3 PK	74.0	-30.7	1.55 H	21	33.1	10.2
8	7386.00	31.2 AV	54.0	-22.8	1.55 H	21	21.0	10.2

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

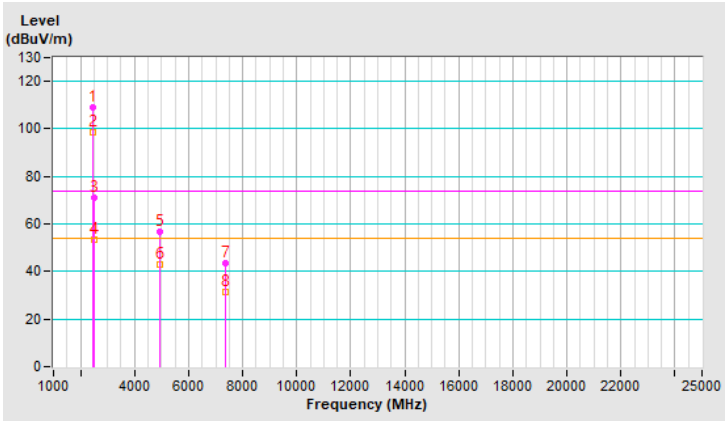


RF Mode	802.11g	Channel	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 510 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	108.8 PK			1.46 V	87	109.7	-0.9
2	*2462.00	98.6 AV			1.46 V	87	99.5	-0.9
3	2483.50	71.1 PK	74.0	-2.9	1.46 V	87	72.0	-0.9
4	2483.50	53.3 AV	54.0	-0.7	1.46 V	87	54.2	-0.9
5	4924.00	56.8 PK	74.0	-17.2	1.30 V	79	52.3	4.5
6	4924.00	43.0 AV	54.0	-11.0	1.30 V	79	38.5	4.5
7	7386.00	43.5 PK	74.0	-30.5	1.42 V	77	33.3	10.2
8	7386.00	31.2 AV	54.0	-22.8	1.42 V	77	21.0	10.2

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

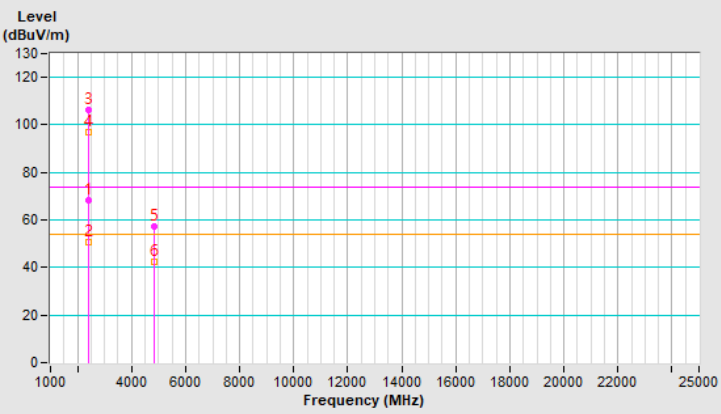


RF Mode	802.11n (HT20)	**Channel**	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	68.4 PK	74.0	-5.6	1.53 H	20	69.4	-1.0
2	2390.00	50.8 AV	54.0	-3.2	1.53 H	20	51.8	-1.0
3	*2412.00	106.1 PK			1.53 H	20	107.1	-1.0
4	*2412.00	96.8 AV			1.53 H	20	97.8	-1.0
5	4824.00	57.3 PK	74.0	-16.7	1.63 H	20	53.0	4.3
6	4824.00	42.6 AV	54.0	-11.4	1.63 H	20	38.3	4.3

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.

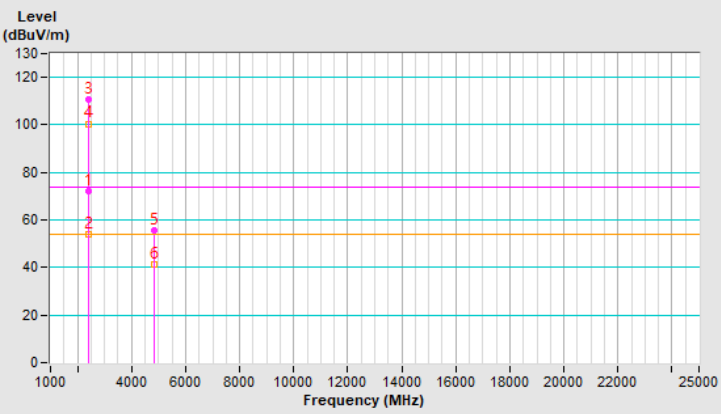


RF Mode	802.11n (HT20)	**Channel**	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	72.2 PK	74.0	-1.8	1.45 V	84	73.2	-1.0
2	2390.00	53.8 AV	54.0	-0.2	1.45 V	84	54.8	-1.0
3	*2412.00	110.6 PK			1.45 V	84	111.6	-1.0
4	*2412.00	100.5 AV			1.45 V	84	101.5	-1.0
5	4824.00	55.4 PK	74.0	-18.6	1.33 V	78	51.1	4.3
6	4824.00	41.5 AV	54.0	-12.5	1.33 V	78	37.2	4.3

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.

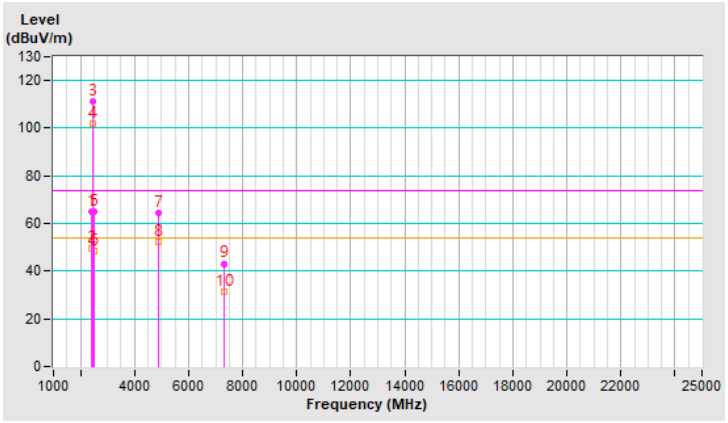


RF Mode	802.11n (HT20)	Channel	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	65.1 PK	74.0	-8.9	1.54 H	20	66.1	-1.0
2	2390.00	49.7 AV	54.0	-4.3	1.54 H	20	50.7	-1.0
3	*2437.00	111.0 PK			1.54 H	20	111.9	-0.9
4	*2437.00	101.8 AV			1.54 H	20	102.7	-0.9
5	2483.50	64.9 PK	74.0	-9.1	1.54 H	20	65.8	-0.9
6	2483.50	48.4 AV	54.0	-5.6	1.54 H	20	49.3	-0.9
7	4874.00	64.6 PK	74.0	-9.4	1.45 H	23	60.3	4.3
8	4874.00	52.1 AV	54.0	-1.9	1.45 H	23	47.8	4.3
9	7311.00	43.2 PK	74.0	-30.8	1.55 H	21	32.9	10.3
10	7311.00	31.3 AV	54.0	-22.7	1.55 H	21	21.0	10.3

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.

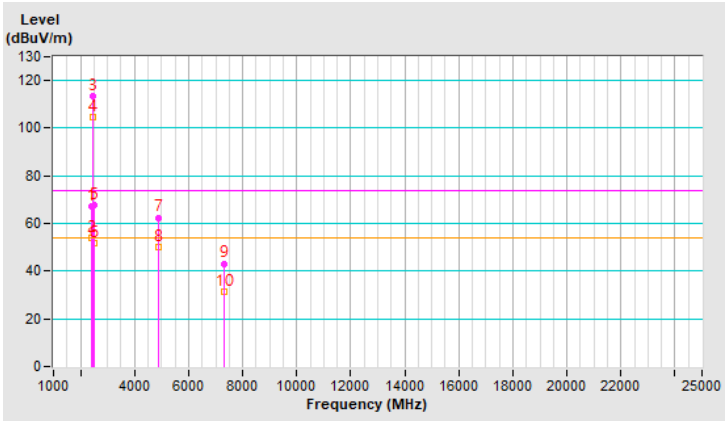


RF Mode	802.11n (HT20)	**Channel**	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	67.1 PK	74.0	-6.9	1.52 V	85	68.1	-1.0
2	2390.00	53.8 AV	54.0	-0.2	1.52 V	85	54.8	-1.0
3	*2437.00	113.5 PK			1.52 V	85	114.4	-0.9
4	*2437.00	104.5 AV			1.52 V	85	105.4	-0.9
5	2483.50	67.9 PK	74.0	-6.1	1.52 V	85	68.8	-0.9
6	2483.50	51.8 AV	54.0	-2.2	1.52 V	85	52.7	-0.9
7	4874.00	62.5 PK	74.0	-11.5	1.33 V	81	58.2	4.3
8	4874.00	50.1 AV	54.0	-3.9	1.33 V	81	45.8	4.3
9	7311.00	43.2 PK	74.0	-30.8	1.44 V	64	32.9	10.3
10	7311.00	31.5 AV	54.0	-22.5	1.44 V	64	21.2	10.3

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.

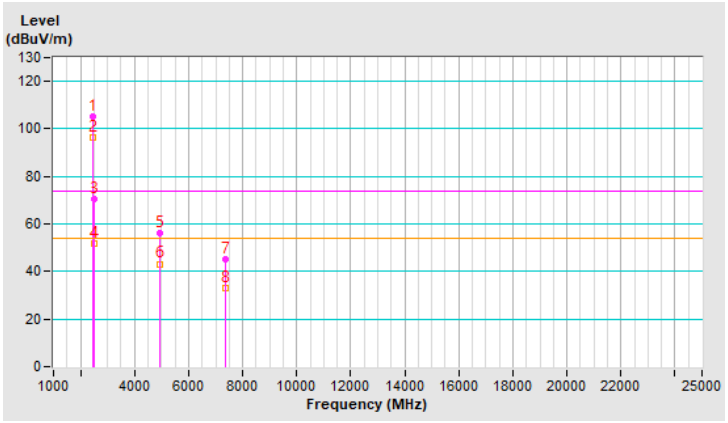


RF Mode	802.11n (HT20)	Channel	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	105.3 PK			1.52 H	20	106.2	-0.9
2	*2462.00	96.2 AV			1.52 H	20	97.1	-0.9
3	2483.50	70.6 PK	74.0	-3.4	1.52 H	20	71.5	-0.9
4	2483.50	52.0 AV	54.0	-2.0	1.52 H	20	52.9	-0.9
5	4924.00	56.1 PK	74.0	-17.9	1.66 H	26	51.6	4.5
6	4924.00	43.2 AV	54.0	-10.8	1.66 H	26	38.7	4.5
7	7386.00	45.0 PK	74.0	-29.0	1.55 H	28	34.8	10.2
8	7386.00	33.1 AV	54.0	-20.9	1.55 H	28	22.9	10.2

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

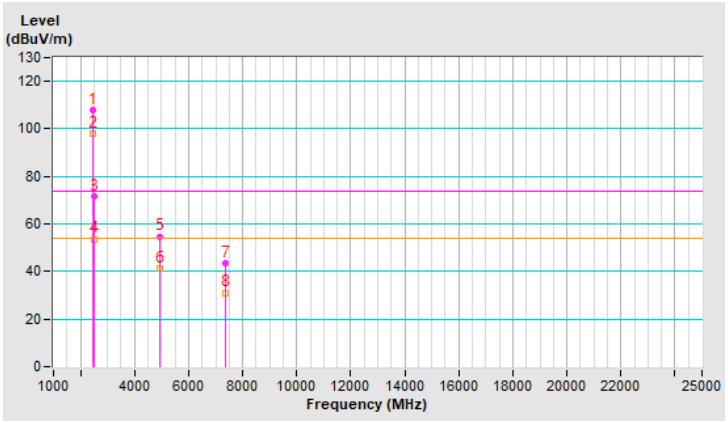


RF Mode	802.11n (HT20)	**Channel**	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	107.9 PK			1.46 V	87	108.8	-0.9
2	*2462.00	98.0 AV			1.46 V	87	98.9	-0.9
3	2483.50	71.5 PK	74.0	-2.5	1.46 V	87	72.4	-0.9
4	2483.50	53.7 AV	54.0	-0.3	1.46 V	87	54.6	-0.9
5	4924.00	54.8 PK	74.0	-19.2	1.33 V	80	50.3	4.5
6	4924.00	41.3 AV	54.0	-12.7	1.33 V	80	36.8	4.5
7	7386.00	43.4 PK	74.0	-30.6	1.52 V	74	33.2	10.2
8	7386.00	31.1 AV	54.0	-22.9	1.52 V	74	20.9	10.2

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

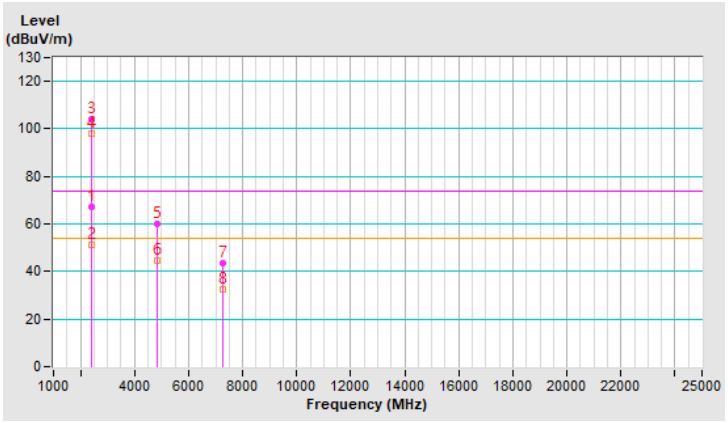


RF Mode	802.11n (HT40)	Channel	CH 3：2422 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 2 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	67.4 PK	74.0	-6.6	1.43 H	23	68.4	-1.0
2	2390.00	51.0 AV	54.0	-3.0	1.43 H	23	52.0	-1.0
3	*2422.00	103.9 PK			1.43 H	23	104.9	-1.0
4	*2422.00	97.9 AV			1.43 H	23	98.9	-1.0
5	4844.00	59.8 PK	74.0	-14.2	1.64 H	22	55.5	4.3
6	4844.00	44.6 AV	54.0	-9.4	1.64 H	22	40.3	4.3
7	7266.00	43.5 PK	74.0	-30.5	1.22 H	28	33.1	10.4
8	7266.00	32.4 AV	54.0	-21.6	1.22 H	28	22.0	10.4

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.

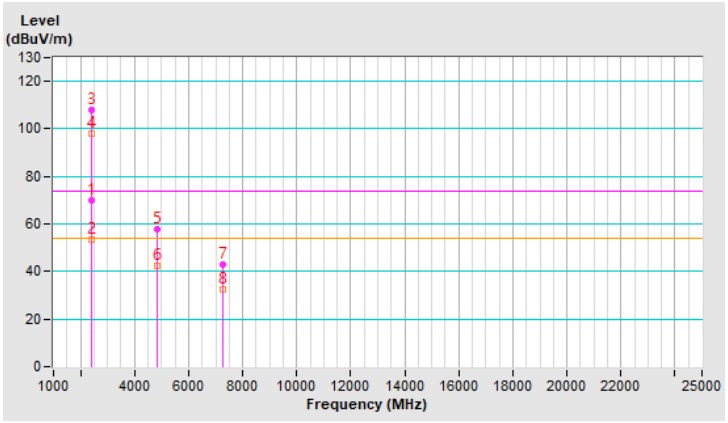


RF Mode	802.11n (HT40)	**Channel**	CH 3：2422 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 2 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	69.9 PK	74.0	-4.1	1.45 V	84	70.9	-1.0
2	2390.00	53.6 AV	54.0	-0.4	1.45 V	84	54.6	-1.0
3	*2422.00	107.7 PK			1.45 V	84	108.7	-1.0
4	*2422.00	97.9 AV			1.45 V	84	98.9	-1.0
5	4844.00	57.9 PK	74.0	-16.1	1.44 V	67	53.6	4.3
6	4844.00	42.5 AV	54.0	-11.5	1.44 V	67	38.2	4.3
7	7266.00	42.7 PK	74.0	-31.3	1.33 V	79	32.3	10.4
8	7266.00	32.6 AV	54.0	-21.4	1.33 V	79	22.2	10.4

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.

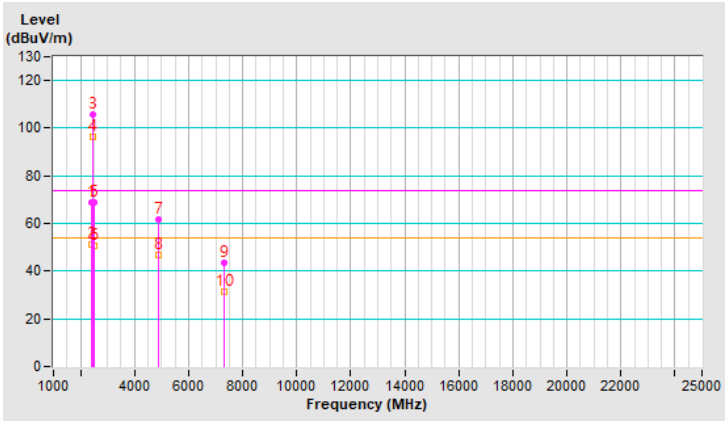


RF Mode	802.11n (HT40)	**Channel**	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 2 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	68.8 PK	74.0	-5.2	1.49 H	25	69.8	-1.0
2	2390.00	51.0 AV	54.0	-3.0	1.49 H	25	52.0	-1.0
3	*2437.00	105.8 PK			1.49 H	25	106.7	-0.9
4	*2437.00	96.4 AV			1.49 H	25	97.3	-0.9
5	2483.50	68.6 PK	74.0	-5.4	1.49 H	25	69.5	-0.9
6	2483.50	50.6 AV	54.0	-3.4	1.49 H	25	51.5	-0.9
7	4874.00	61.8 PK	74.0	-12.2	1.55 H	23	57.5	4.3
8	4874.00	46.6 AV	54.0	-7.4	1.55 H	23	42.3	4.3
9	7311.00	43.4 PK	74.0	-30.6	1.55 H	20	33.1	10.3
10	7311.00	31.5 AV	54.0	-22.5	1.55 H	20	21.2	10.3

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.

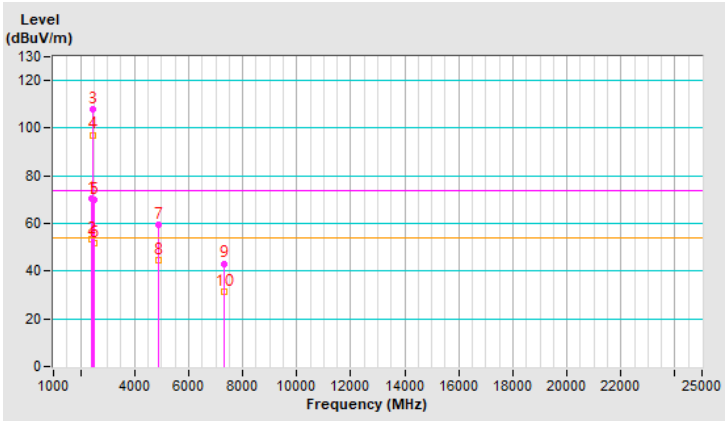


RF Mode	802.11n (HT40)	**Channel**	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 2 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	70.4 PK	74.0	-3.6	1.52 V	84	71.4	-1.0
2	2390.00	53.5 AV	54.0	-0.5	1.52 V	84	54.5	-1.0
3	*2437.00	107.7 PK			1.52 V	84	108.6	-0.9
4	*2437.00	97.2 AV			1.52 V	84	98.1	-0.9
5	2483.50	69.9 PK	74.0	-4.1	1.52 V	84	70.8	-0.9
6	2483.50	51.8 AV	54.0	-2.2	1.52 V	84	52.7	-0.9
7	4874.00	59.6 PK	74.0	-14.4	1.53 V	80	55.3	4.3
8	4874.00	44.7 AV	54.0	-9.3	1.53 V	80	40.4	4.3
9	7311.00	43.2 PK	74.0	-30.8	1.45 V	81	32.9	10.3
10	7311.00	31.6 AV	54.0	-22.4	1.45 V	81	21.3	10.3

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.

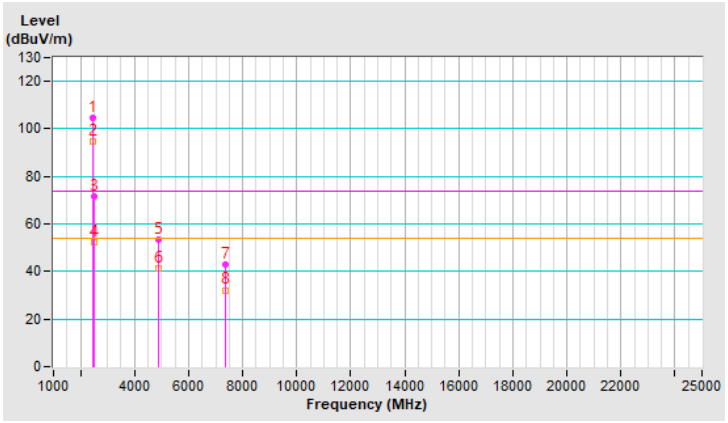


RF Mode	802.11n (HT40)	Channel	CH 9：2452 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 2 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Sampson Chen		

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	*2452.00	104.6 PK			1.52 H	26	105.4	-0.8
2	*2452.00	94.8 AV			1.52 H	26	95.6	-0.8
3	2483.50	71.8 PK	74.0	-2.2	1.52 H	26	72.7	-0.9
4	2483.50	52.4 AV	54.0	-1.6	1.52 H	26	53.3	-0.9
5	4904.00	53.4 PK	74.0	-20.6	1.41 H	23	49.0	4.4
6	4904.00	41.2 AV	54.0	-12.8	1.41 H	23	36.8	4.4
7	7356.00	43.1 PK	74.0	-30.9	1.33 H	20	32.8	10.3
8	7356.00	32.2 AV	54.0	-21.8	1.33 H	20	21.9	10.3

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.

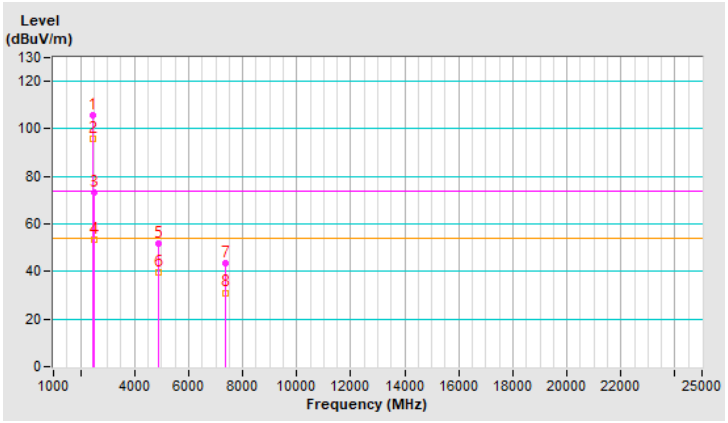


RF Mode	802.11n (HT40)	**Channel**	CH 9：2452 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 2 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Sampson Chen		

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	*2452.00	105.5 PK			1.47 V	82	106.3	-0.8
2	*2452.00	95.7 AV			1.47 V	82	96.5	-0.8
3	2483.50	73.0 PK	74.0	-1.0	1.47 V	82	73.9	-0.9
4	2483.50	53.2 AV	54.0	-0.8	1.47 V	82	54.1	-0.9
5	4904.00	51.6 PK	74.0	-22.4	1.34 V	88	47.2	4.4
6	4904.00	39.8 AV	54.0	-14.2	1.34 V	88	35.4	4.4
7	7356.00	43.4 PK	74.0	-30.6	1.64 V	71	33.1	10.3
8	7356.00	31.1 AV	54.0	-22.9	1.64 V	71	20.8	10.3

Remarks:

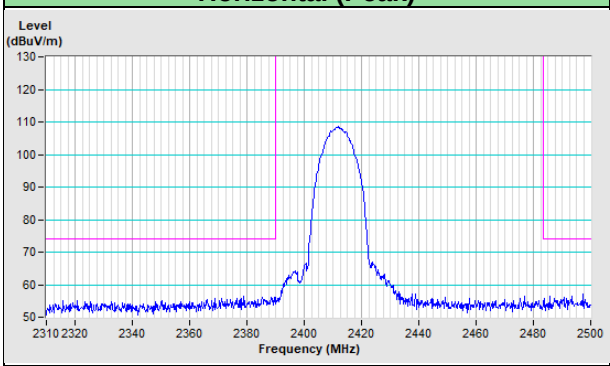
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.



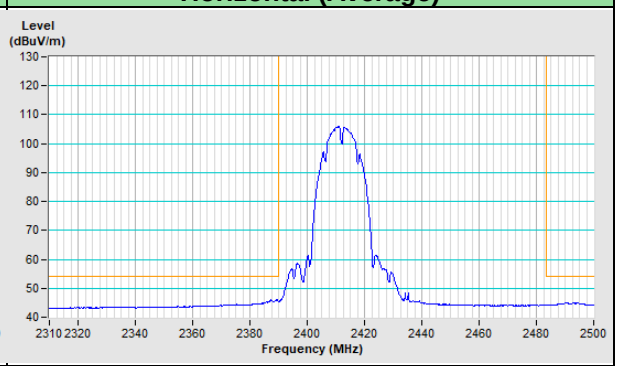
Plot of Band Edge_Mode A

802.11b Channel 1

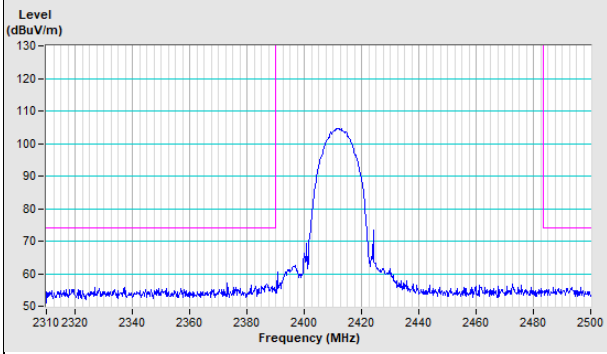
Horizontal (Peak)



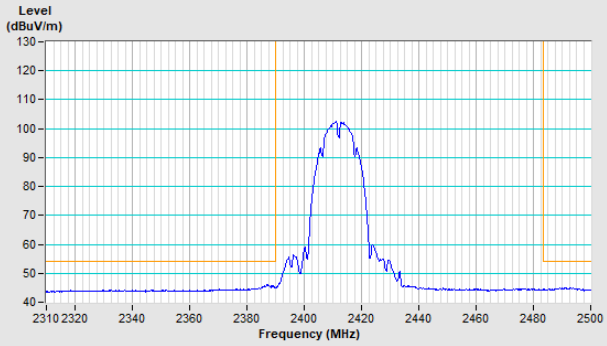
Horizontal (Average)



Vertical (Peak)

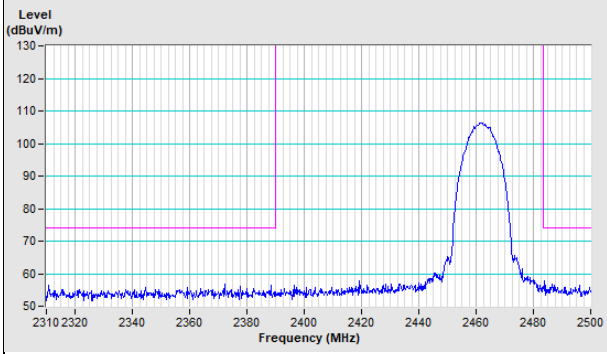


Vertical (Average)

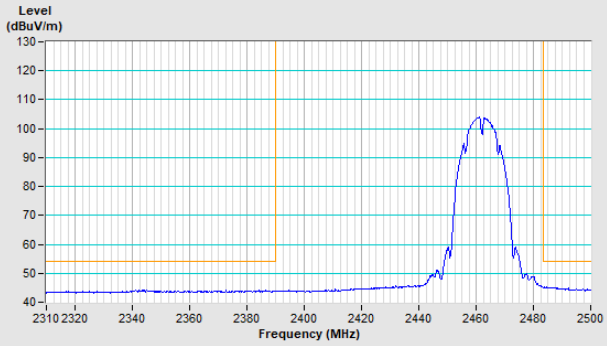


802.11b Channel 11

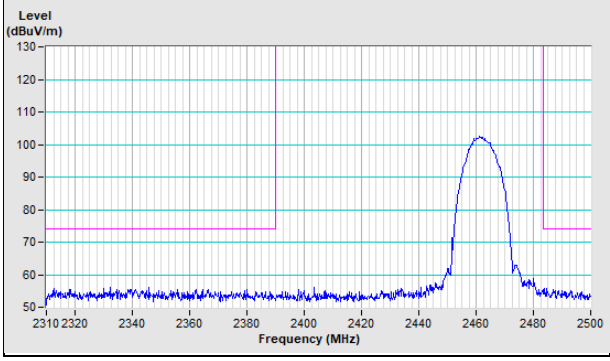
Horizontal (Peak)



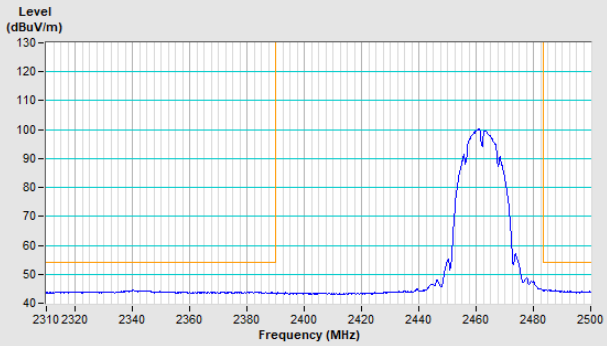
Horizontal (Average)



Vertical (Peak)

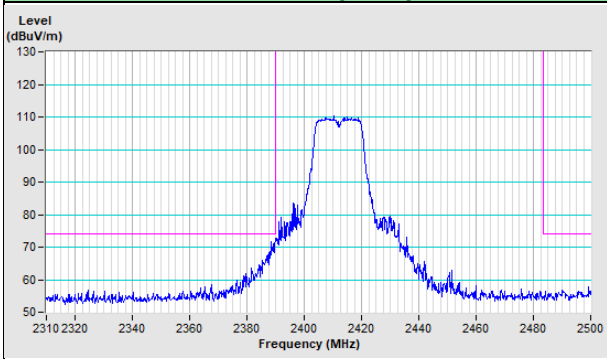


Vertical (Average)

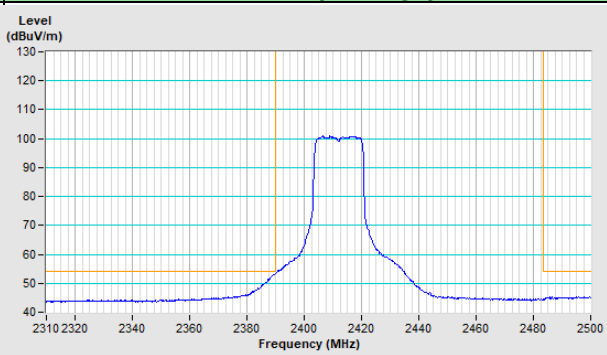


802.11g Channel 1

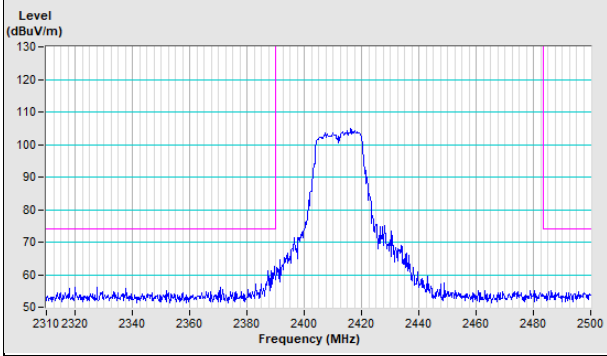
Horizontal (Peak)



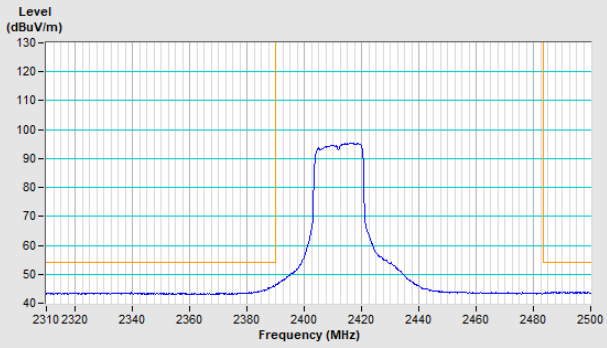
Horizontal (Average)



Vertical (Peak)

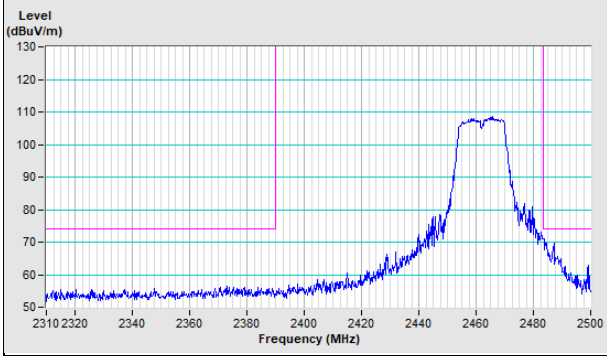


Vertical (Average)

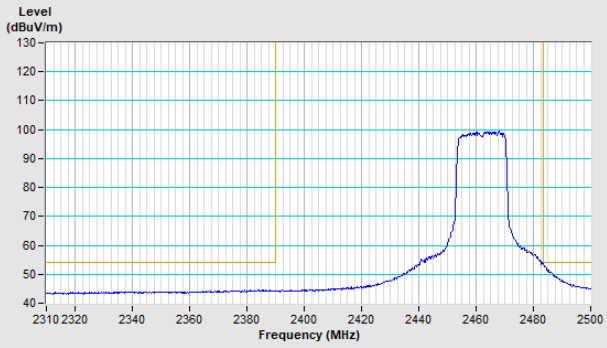


802.11g Channel 11

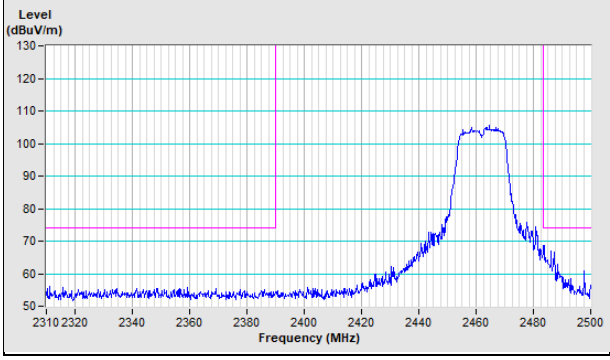
Horizontal (Peak)



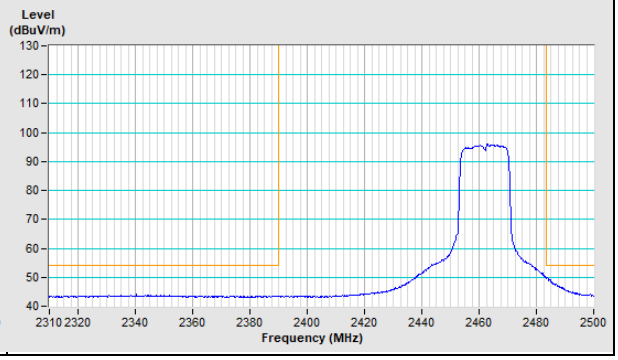
Horizontal (Average)



Vertical (Peak)

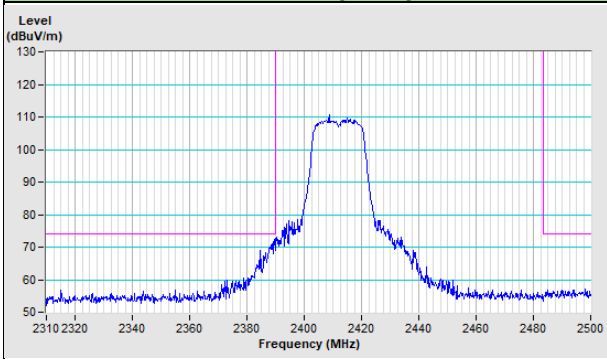


Vertical (Average)

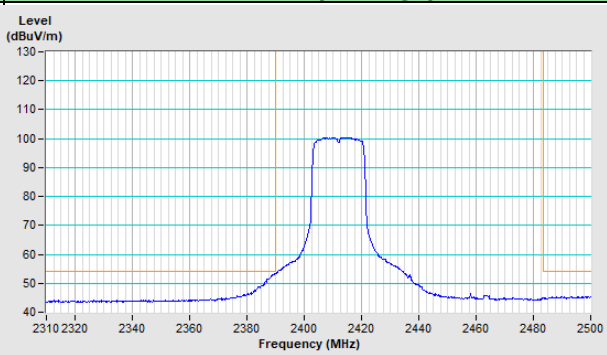


802.11n (HT20) Channel 1

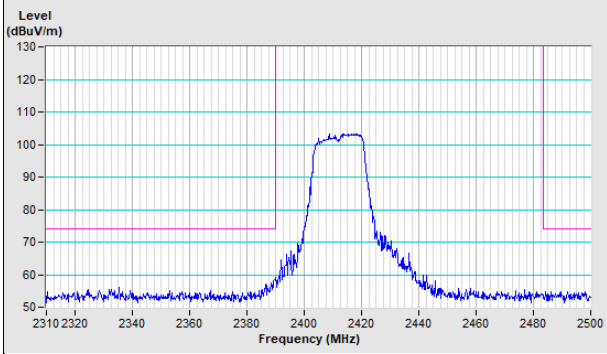
Horizontal (Peak)



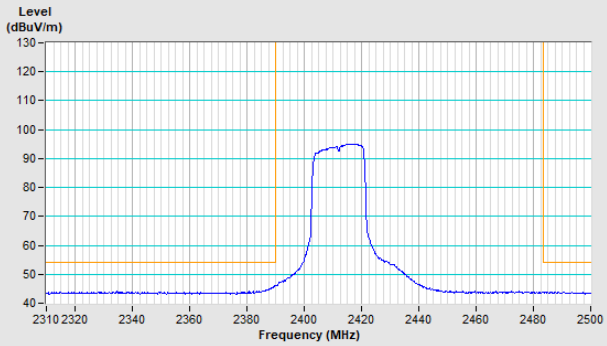
Horizontal (Average)



Vertical (Peak)

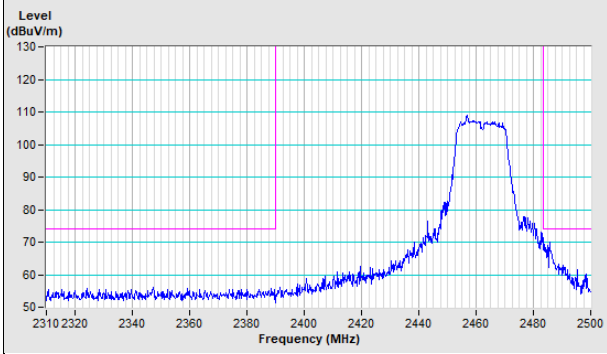


Vertical (Average)

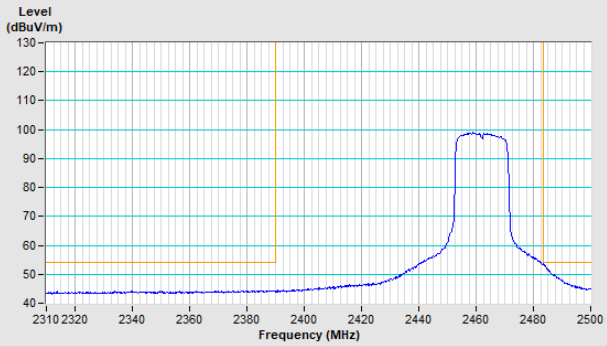


802.11n (HT20) Channel 11

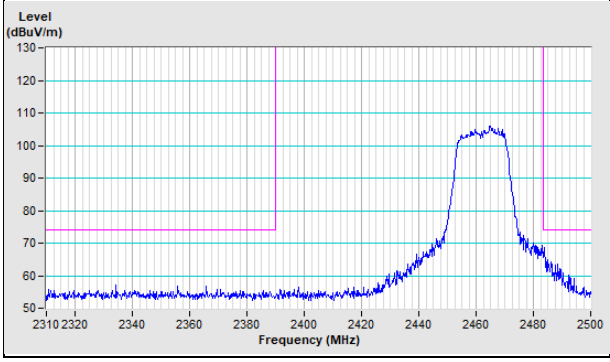
Horizontal (Peak)



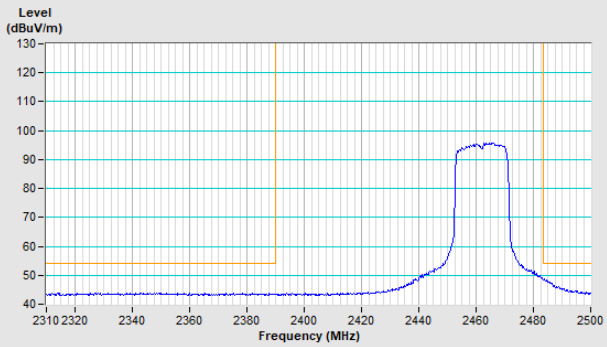
Horizontal (Average)



Vertical (Peak)

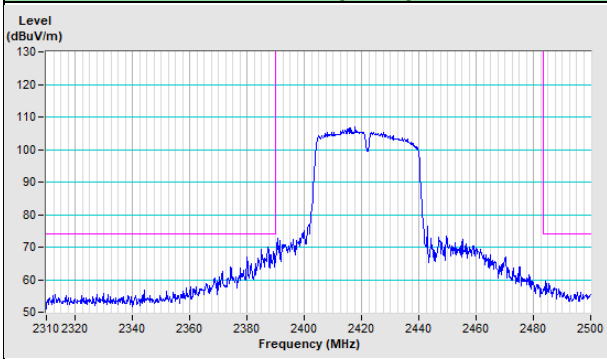


Vertical (Average)

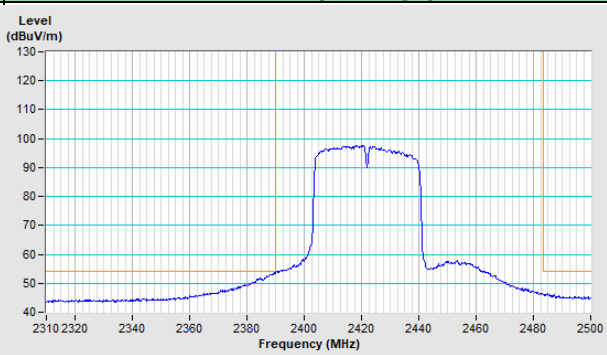


802.11n (HT40) Channel 3

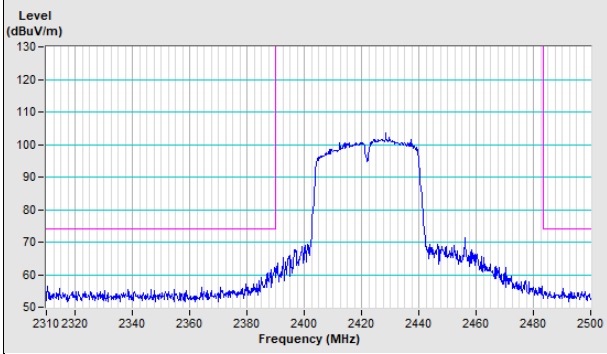
Horizontal (Peak)



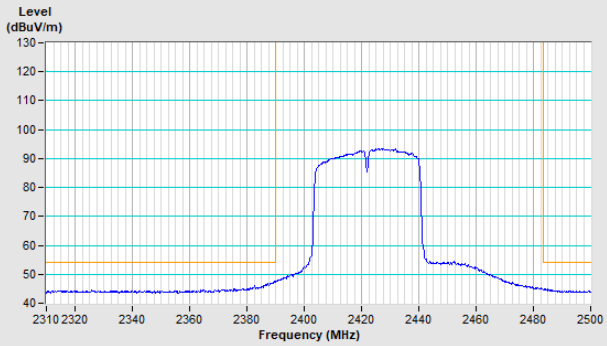
Horizontal (Average)



Vertical (Peak)

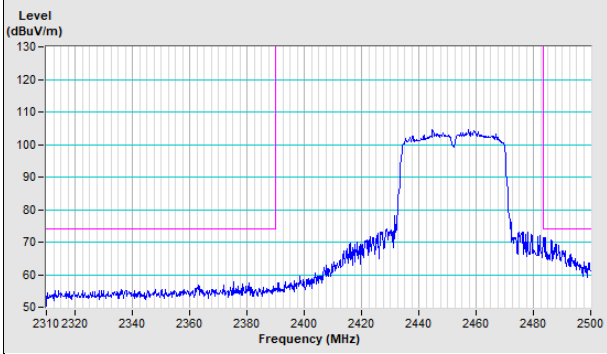


Vertical (Average)

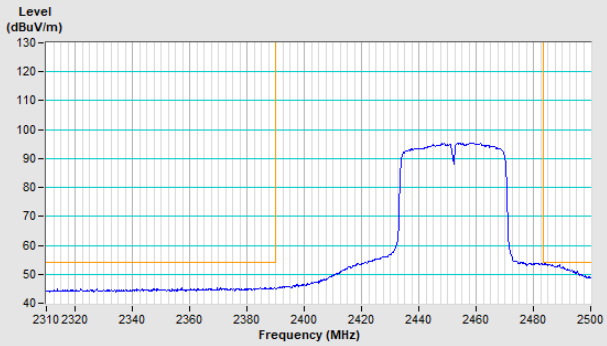


802.11n (HT40) Channel 9

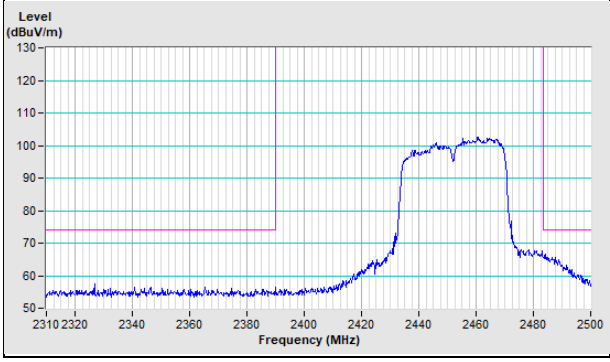
Horizontal (Peak)



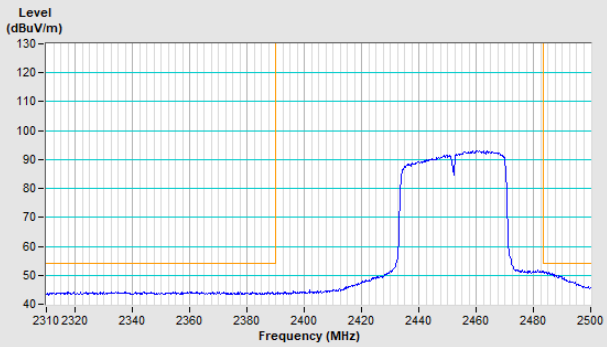
Horizontal (Average)



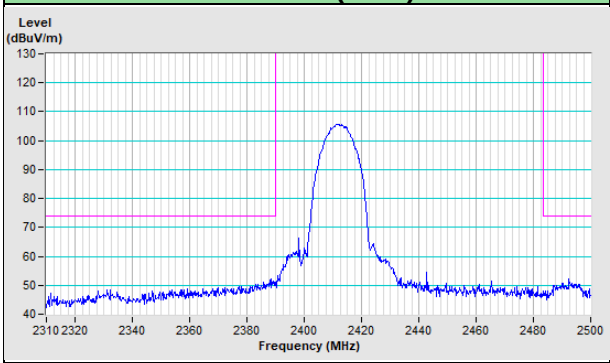
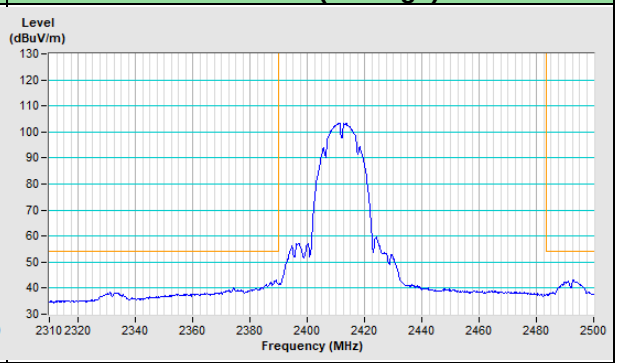
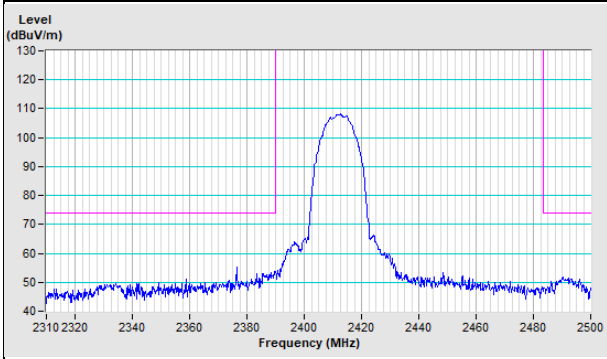
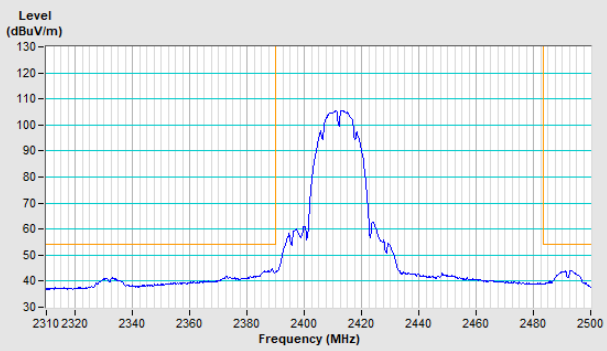
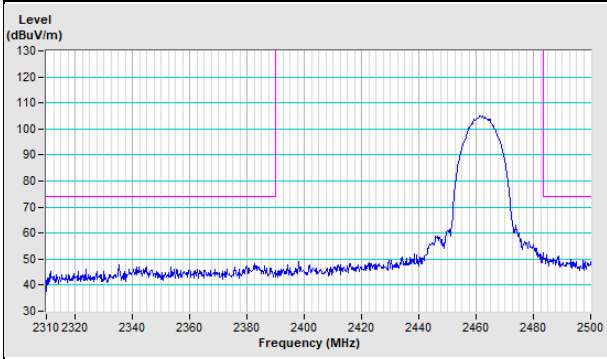
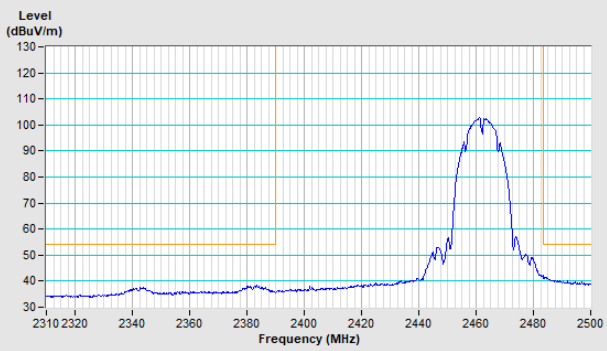
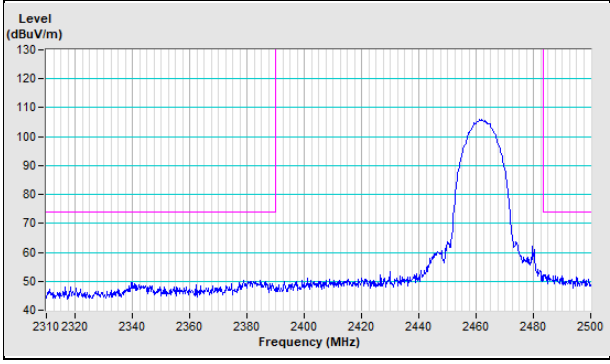
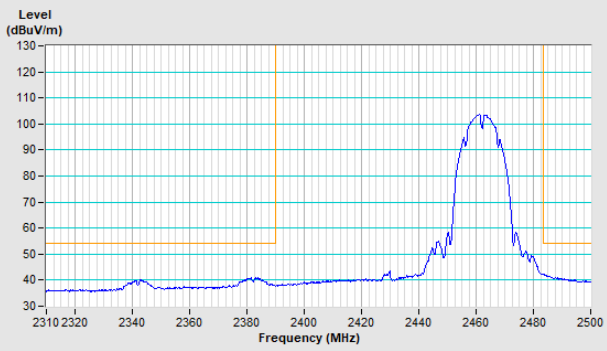
Vertical (Peak)



Vertical (Average)

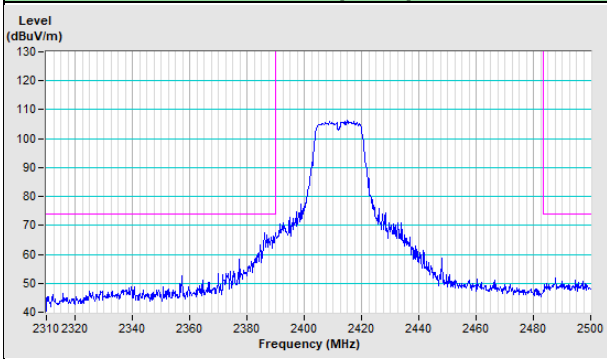


Plot of Band Edge_Mode B

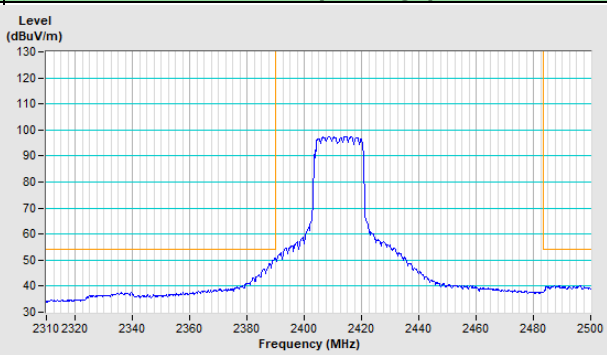
802.11b Channel 1	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11b Channel 11	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11g Channel 1

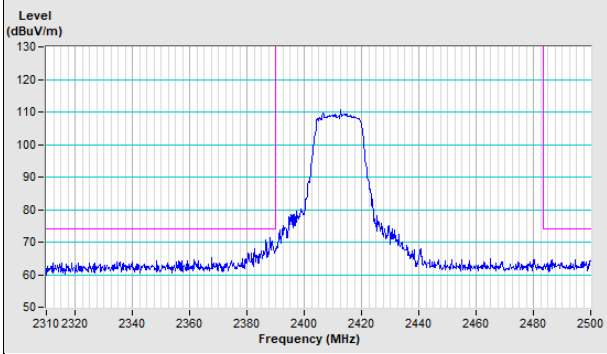
Horizontal (Peak)



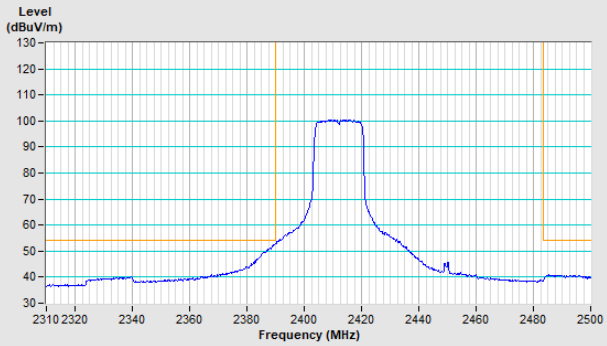
Horizontal (Average)



Vertical (Peak)

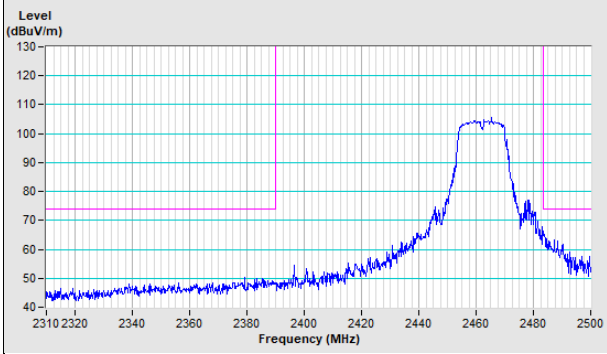


Vertical (Average)

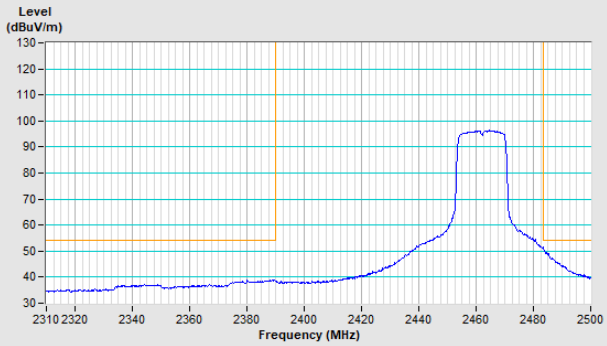


802.11g Channel 11

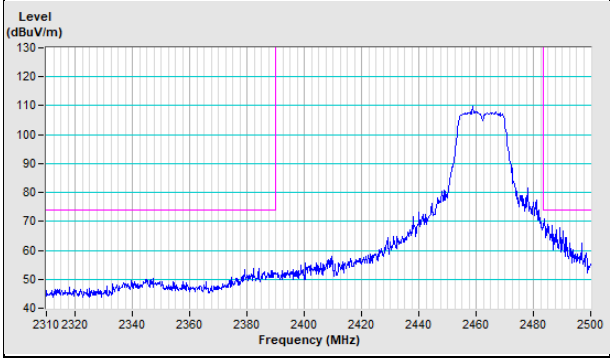
Horizontal (Peak)



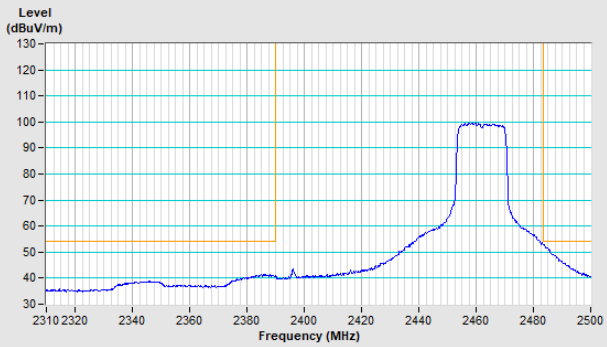
Horizontal (Average)



Vertical (Peak)

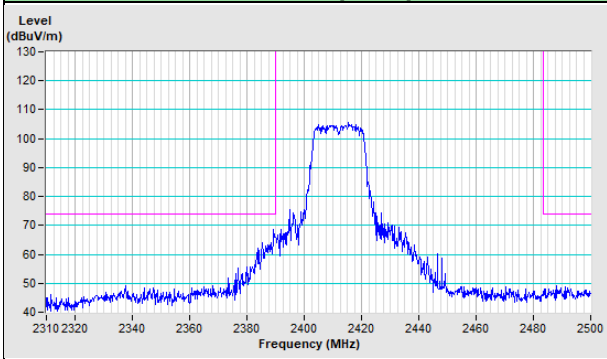


Vertical (Average)

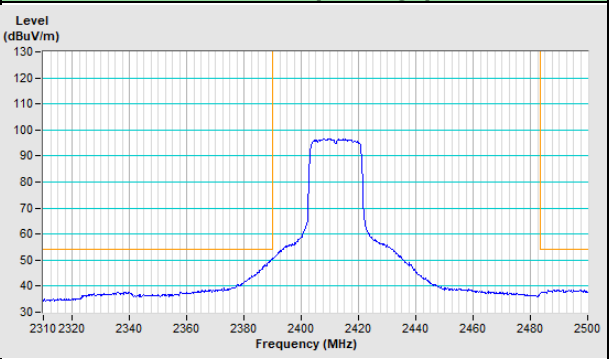


802.11n (HT20) Channel 1

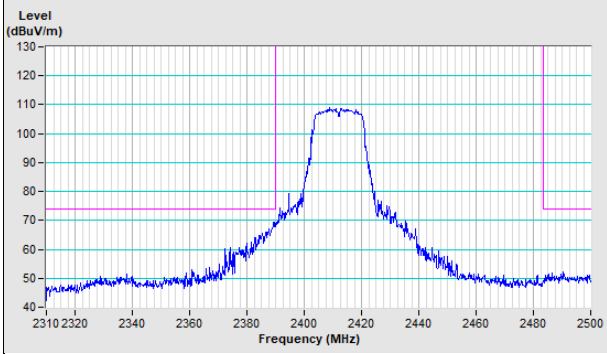
Horizontal (Peak)



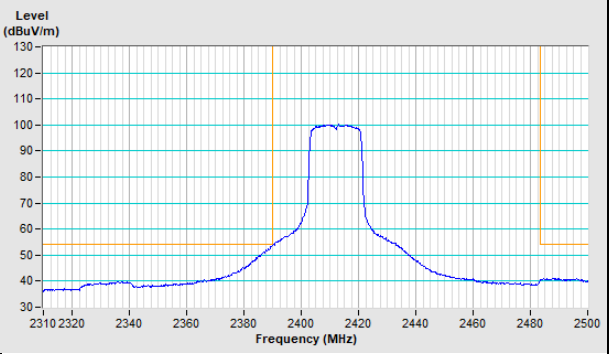
Horizontal (Average)



Vertical (Peak)

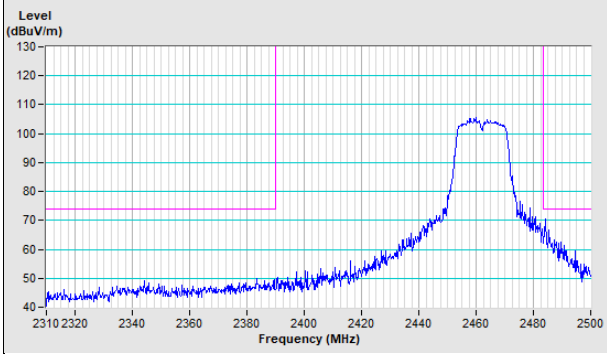


Vertical (Average)

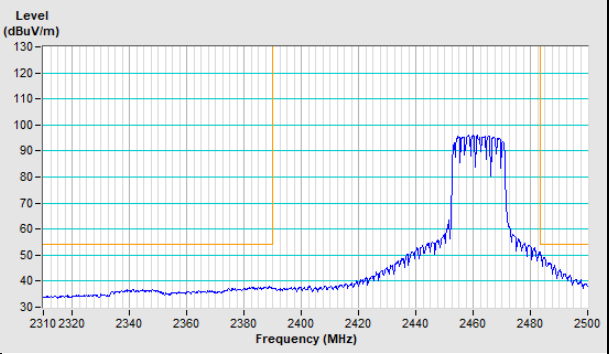


802.11n (HT20) Channel 11

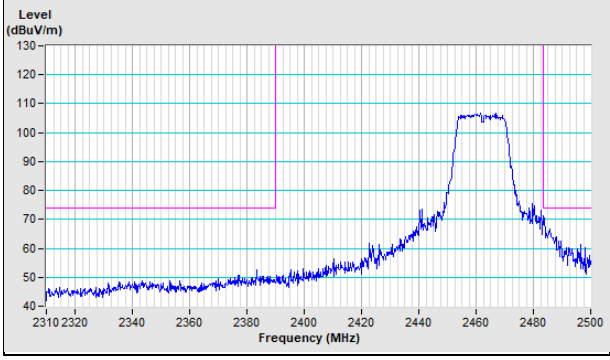
Horizontal (Peak)



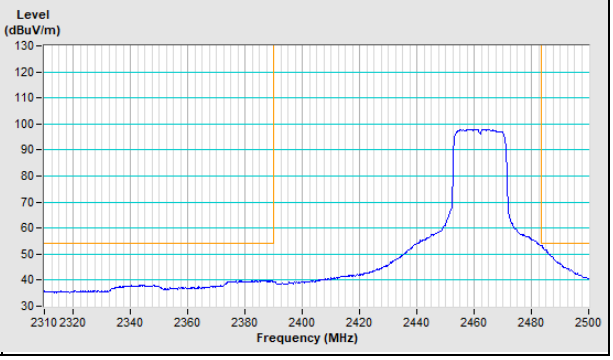
Horizontal (Average)



Vertical (Peak)

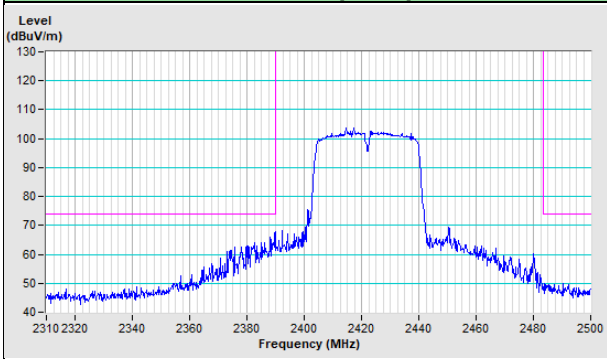


Vertical (Average)

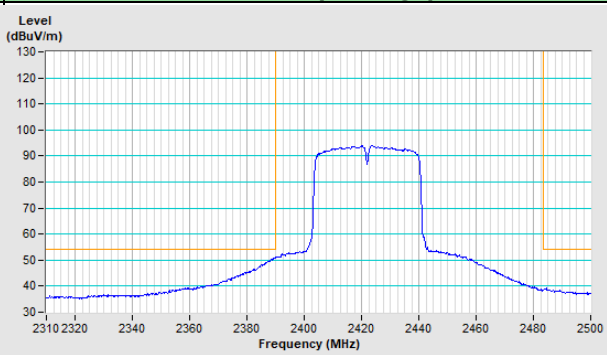


802.11n (HT40) Channel 3

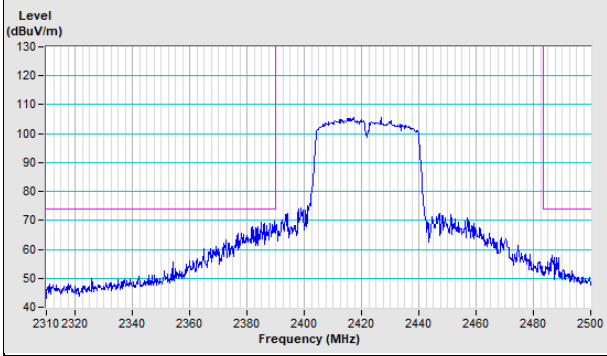
Horizontal (Peak)



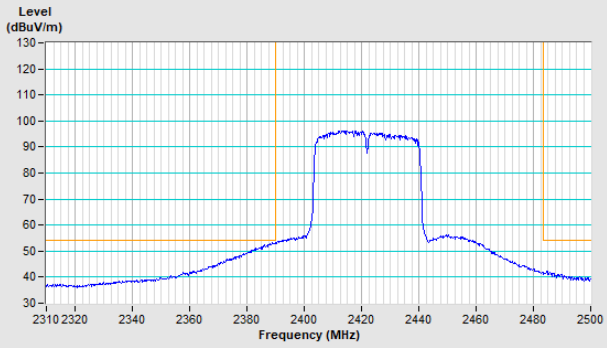
Horizontal (Average)



Vertical (Peak)

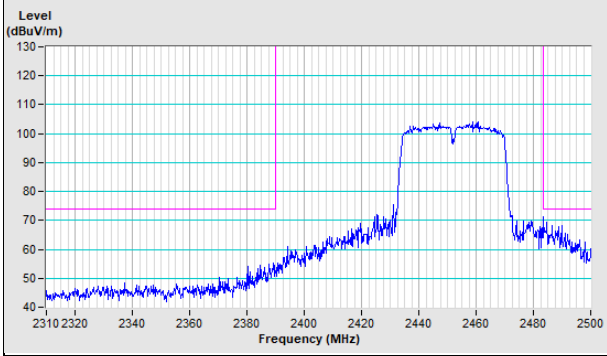


Vertical (Average)

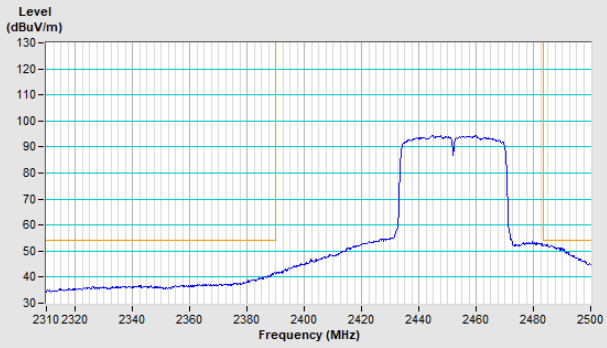


802.11n (HT40) Channel 9

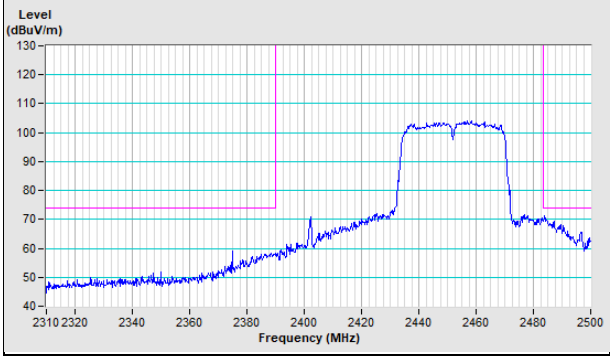
Horizontal (Peak)



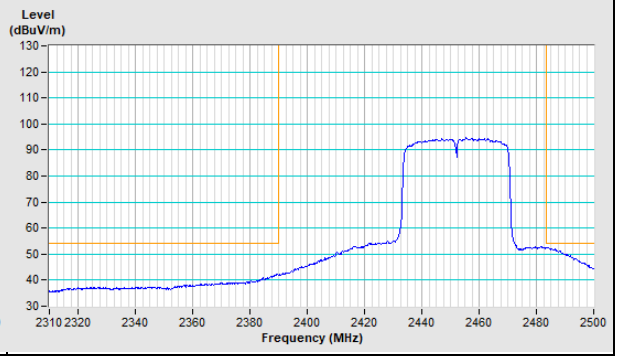
Horizontal (Average)



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:

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

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

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