

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart C (Section 15.247)

Report No.: RFBFLF-WTW-P24100005

FCC ID: MSQ-RTAX8900

Product: Dual Band WiFi 6 Travel Router

Brand: ASUSTek Computer Inc. or



Model No.: RT-AX50 Go

Received Date: 2024/11/4

Test Date: 2025/4/24 ~ 2025/5/22

Issued Date: 2025/8/6

Applicant: ASUSTek COMPUTER INC.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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FCC Registration / 723255 / TW2022

Designation Number:

Approved by: _____

May Chen / Manager

Date: _____

2025/8/6

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Prepared by : Phoenix Huang / Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBFLF-WTW-P24100005	Original release.	2025/8/6

1 Certificate

Product: Dual Band WiFi 6 Travel Router

Brand: ASUSTek Computer Inc. or



Test Model: RT-AX50 Go

Sample Status: Engineering sample

Applicant: ASUSTeK COMPUTER INC.

Test Date: 2025/4/24 ~ 2025/5/22

Standard: 47 CFR FCC Part 15, Subpart C (Section 15.247)

Measurement ANSI C63.10-2013

procedure:

KDB 558074 D01 15.247 Meas Guidance v05r02

KDB 662911 D01 Multiple Transmitter Output v02r01

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

2 Summary of Test Results

47 CFR FCC Part 15, Subpart C (Section 15.247)			
Standard / Clause	Test Item	Result	Remark
15.247(b)	RF Output Power	Pass	Meet the requirement of limit.
15.247(e)	Power Spectral Density	Pass	Meet the requirement of limit.
15.247(a)(2)	6 dB Bandwidth	Pass	Meet the requirement of limit.
15.247(d)	Conducted Out of Band Emissions	Pass	Meet the requirement of limit.
15.207	AC Power Conducted Emissions	Pass	Minimum passing margin is -5.29 dB at 23.63281 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -3.4 dB at 42.96 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -1.5 dB at 2483.50 MHz
15.203	Antenna Requirement	Pass	No antenna connector is used.

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Parameter	Specification	Expanded Uncertainty (k=2) (±)
RF Output Power	-	1.1 dB
Power Spectral Density	-	1.3 dB
6 dB Bandwidth	-	1050.00 Hz
Conducted Out of Band Emissions	9 kHz ~ 40 GHz	2.6 dB
AC Power Conducted Emissions	150 kHz ~ 30 MHz	1.9 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.1 dB
	30 MHz ~ 1 GHz	5.5 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	5.1 dB
	18 GHz ~ 40 GHz	5.3 dB

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

2.2 Supplementary Information

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

3 General Information

3.1 General Description

Product	Dual Band WiFi 6 Travel Router
Brand	ASUSTek Computer Inc. or 
Test Model	RT-AX50 Go
Status of EUT	Engineering sample
Power Supply Rating	5 Vdc / 9 Vdc / 12Vdc from adapter
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 300 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	513.529 mW (27.11 dBm)

Note:

1. The EUT uses following accessories.

Item	Brand	Model	Specification
RJ45 Cable	Shenzhen Eternity Ju Electronic Co., Ltd.	902-CN41401	Signal Line: unshielded, 0.3 m
Type C Cable	Shenzhen Eternity Ju Electronic Co., Ltd.	903-CN41402	Signal Line: unshielded, 0.3 m

2. There are WLAN (2.4 GHz) and WLAN (5 GHz) technology used for the EUT.

3. Simultaneously transmission combination.

Combination	Technology	
1	WLAN (2.4 GHz)	WLAN (5 GHz)

Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.

4. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

3.2 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 (GHz)	Antenna Type	Connector Type
1	0	LYNvave	ALX23M-222AAA	1.9	2.4 ~ 2.4835	PIFA	None
				4.1	5.15 ~ 5.25		
					5.25 ~ 5.35		
					5.47 ~ 5.725		
					5.725 ~ 5.85		
2	1	LYNvave	ALX23M-222AA9	2.3	2.4 ~ 2.4835	PIFA	None
				4.8	5.15 ~ 5.25		
					5.25 ~ 5.35		
					5.47 ~ 5.725		
					5.725 ~ 5.85		

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

2. The EUT incorporates a MIMO function:

2.4 GHz Band		
Modulation Mode	TX & RX Configuration	
802.11b	2TX	2RX
802.11g	2TX	2RX
802.11n (HT20)	2TX	2RX
802.11n (HT40)	2TX	2RX

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

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

Test Item	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
RF Output Power	802.11b	CDD	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
Power Spectral Density	802.11b	CDD	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	CDD	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	802.11g	CDD	6	BPSK	6Mb/s
Unwanted Emissions below 1 GHz	802.11g	CDD	6	BPSK	6Mb/s
Unwanted Emissions above 1 GHz	802.11b	CDD	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

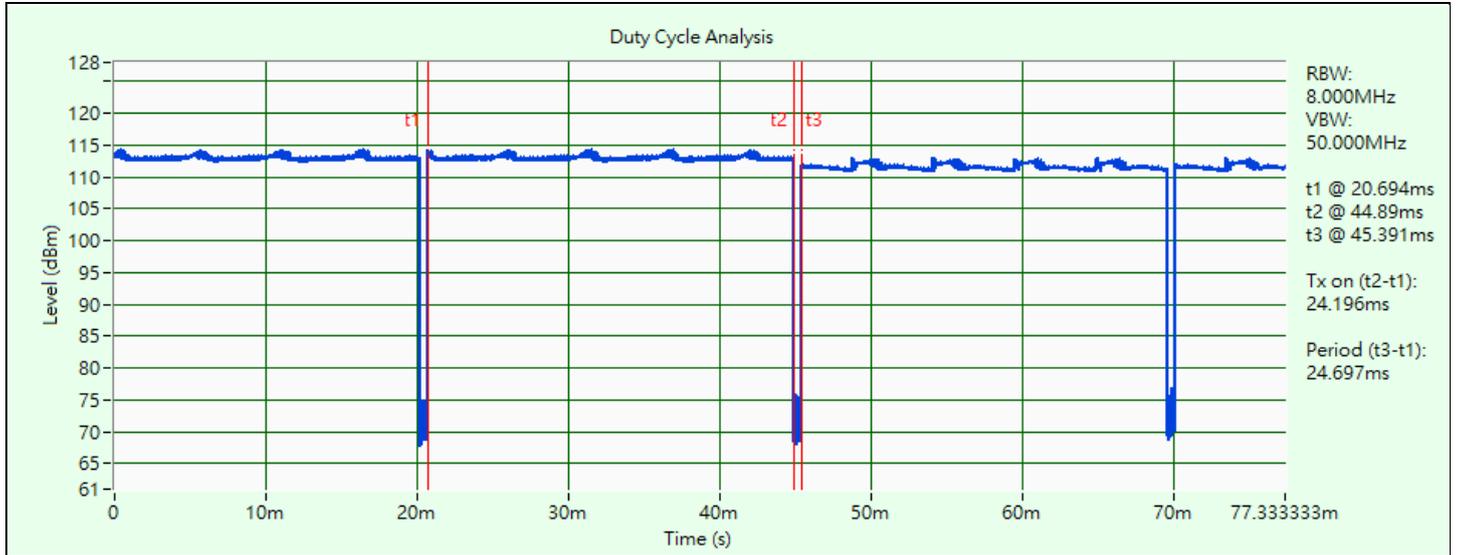
3.5 Duty Cycle of Test Signal

802.11b: Duty cycle = 24.196 ms / 24.697 ms x 100% = 98.0%

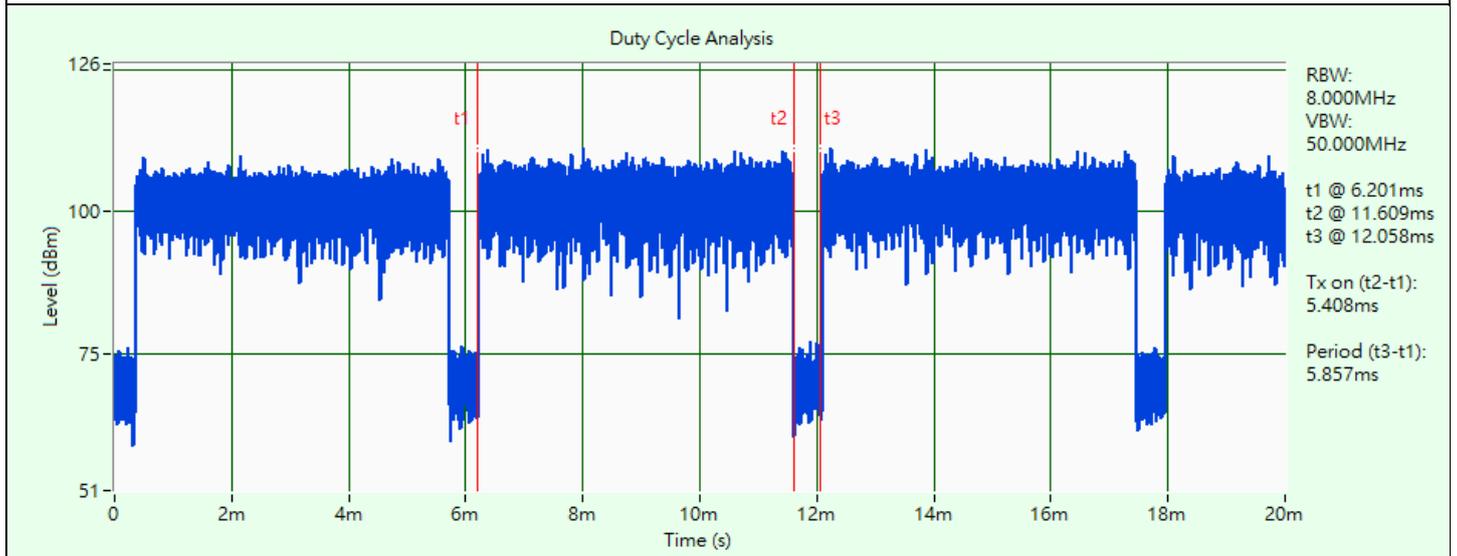
802.11g: Duty cycle = 5.408 ms / 5.857 ms x 100% = 92.3%, duty factor = 10 * log (1/Duty cycle) = 0.35 dB

802.11n (HT20): Duty cycle = 13.581 ms / 14.082 ms x 100% = 96.4%, duty factor = 10 * log (1/Duty cycle) = 0.16 dB

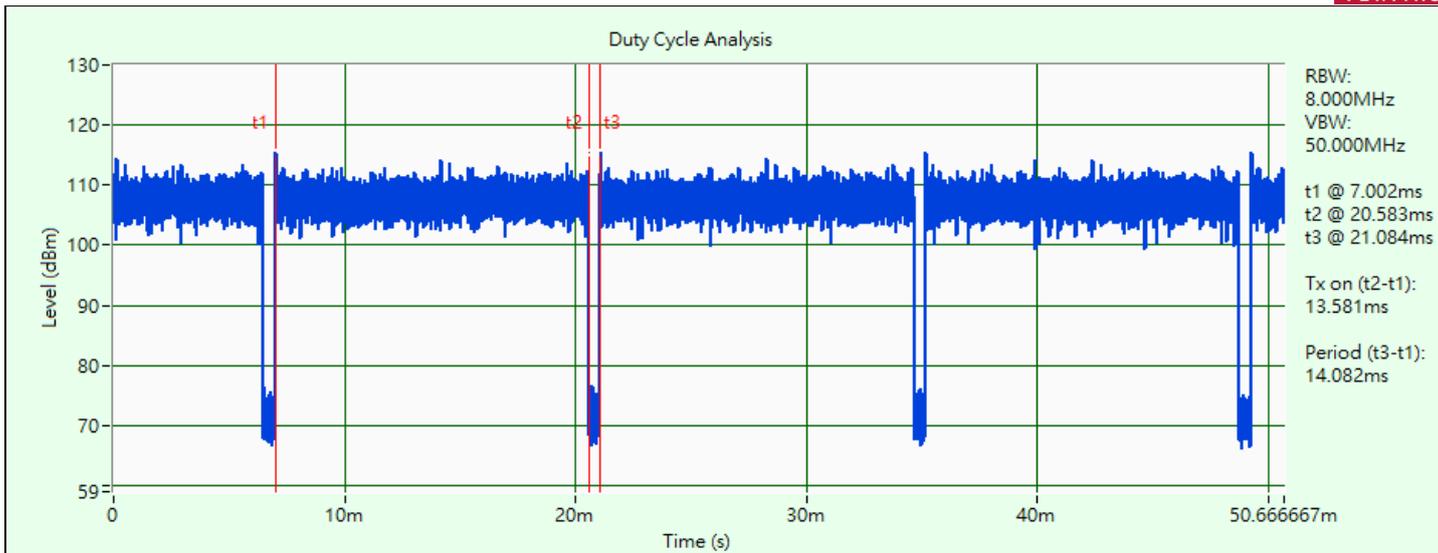
802.11n (HT40): Duty cycle = 7.153 ms / 7.655 ms x 100% = 93.4%, duty factor = 10 * log (1/Duty cycle) = 0.29 dB



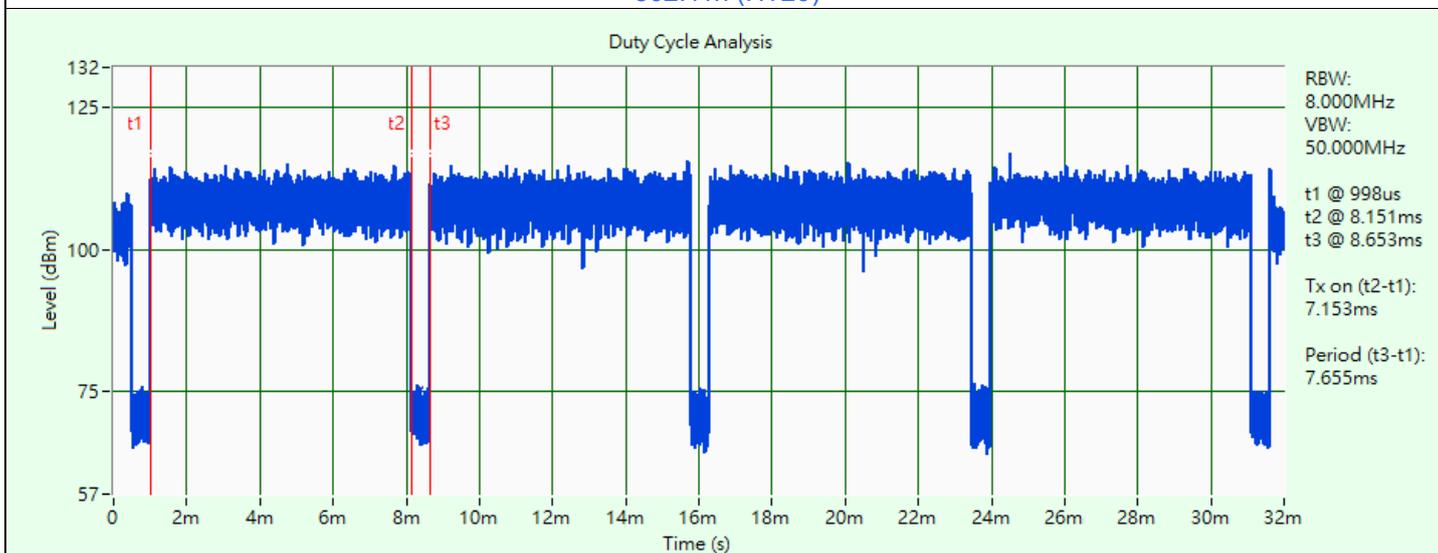
802.11b



802.11g



802.11n (HT20)

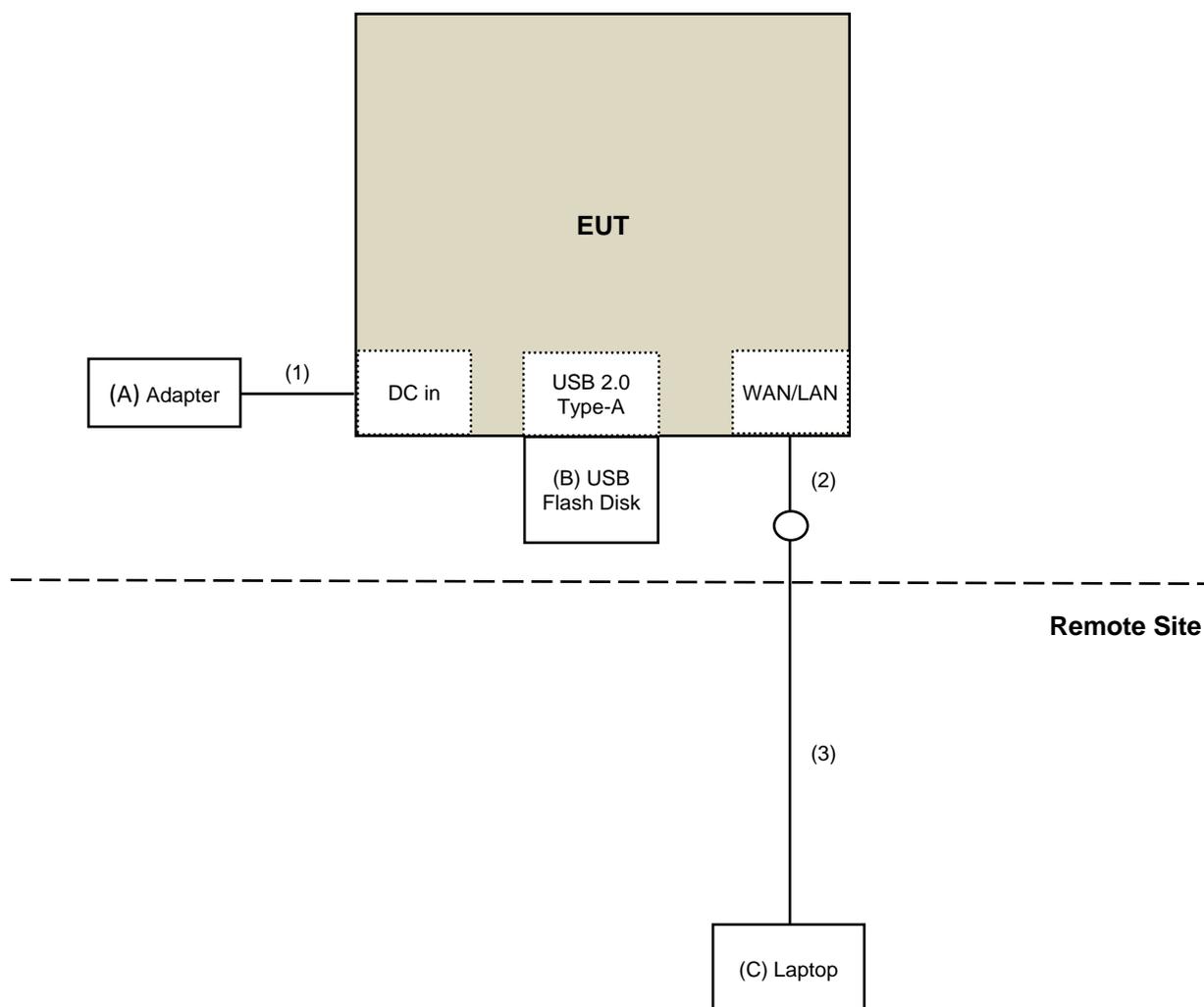


802.11n (HT40)

3.6 Test Program Used and Operation Descriptions

Controlling software (AX1500_MP_tool_2G_20201022(29590)) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Adapter	CHANNEL WELL TECHNOLOGY	2AFG0108	PF-1ANPYA	N/A	Supplied by applicant
B	USB Flash Disk	SanDisk	SDDDC3-032G- I35NB	BM22065835SW	N/A	Provided by Lab
C	Laptop	Lenovo	20U5S01X00 L14	PF-1ANPYA	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	USB Type C Cable	1	0.3	No	0	Supplied by applicant
2	RJ-45 Cable	1	0.3	No	0	Supplied by applicant
3	RJ-45 Cable	1	10	No	0	Provided by Lab

4 Test Instruments

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

4.1 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-20	00800A1K01A-20-02	2024/5/29	2025/5/28
Pulse Power Sensor Anritsu	MA2411B	1726434	2024/6/7	2025/6/6
RF Power Meter Anritsu	ML2495A	1529002	2024/6/7	2025/6/6

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2025/5/22

4.2 Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2024/5/29	2025/5/28
PXA Signal Analyzer Keysight	N9030A	MY55410176	2024/6/12	2025/6/11
Software	ADT_RF Test Software V8	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2025/5/22

4.3 6 dB Bandwidth

Refer to section 4.2 to get the tested date and information of the instruments.

4.4 Conducted Out of Band Emissions

Refer to section 4.2 to get the tested date and information of the instruments.

4.5 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance Telegartner	50 ohm	3	2024/11/1	2025/10/31
EMI Test Receiver R&S	ESCS 30	100375	2024/5/20	2025/5/19
Fixed Attenuator STI	STI02-2200-10	005	2025/2/17	2026/2/16
LISN R&S	ESH3-Z5	835239/001	2025/3/27	2026/3/26
		848773/004	2024/10/7	2025/10/6
RF Coaxial Cable JYEBAO	5D-FB	COCCAB-001	2025/2/17	2026/2/16
Software BVADT	BVADT_Cond_V7.3.7.4	N/A	N/A	N/A

Notes:

1. The test was performed in Conduction 1
2. Tested Date: 2025/5/19

4.6 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-406	2024/10/8	2025/10/7
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Fixed Attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-03	2025/2/15	2026/2/14
Loop Antenna TESEQ	HLA 6121	63620	2024/10/17	2025/10/16
MXE EMI Receiver Agilent	N9038A	MY51210202	2024/7/29	2025/7/28
Preamplifier EMCI	EMC330N	980701	2025/2/15	2026/2/14
	EMC001340	980142	2025/2/17	2026/2/16
RF Coaxial Cable mTJ	100100-CFD400LW-200	CFD400-200	2025/2/15	2026/2/14
	100100-CFD400LW-400	CFD400-400	2025/2/15	2026/2/14
	100100-CFD400LW-800	CFD400-800	2025/2/15	2026/2/14
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in 966 Chamber No. 4.
2. Tested Date: 2025/5/14

4.7 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-783	2024/11/10	2025/11/9
	BBHA 9170	9170-739	2024/11/10	2025/11/9
MXA Signal Analyzer Keysight	N9020B	MY60112410	2025/3/17	2026/3/16
Preamplifier EMCI	EMC12630SE	980688	2024/8/8	2025/8/7
	EMC184045SE	980387	2024/8/8	2025/8/7
RF Coaxial Cable EMCI	EMC102-KM-KM-1200	160924	2025/1/24	2026/1/23
	EMC102-KM-KM-4000	200214	2025/1/24	2026/1/23
	EMC104-SM-SM-1200	160922	2025/1/14	2026/1/13
	EMC104-SM-SM-2000	180502	2025/1/14	2026/1/13
	EMC104-SM-SM-6000	210704	2024/10/30	2025/10/29
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in 966 Chamber No. 4.
2. Tested Date: 2025/4/24 ~ 2025/5/22

5 Limits of Test Items

5.1 RF Output Power

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

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

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

Array Gain = $5 \log(N_{ANT}/N_{SS})$ dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

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

5.2 Power Spectral Density

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

5.3 6 dB Bandwidth

The minimum of 6 dB Bandwidth Measurement is 0.5 MHz.

5.4 Conducted Out of Band Emissions

Below 30 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 30 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 30 dB below the highest level of the desired power:

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

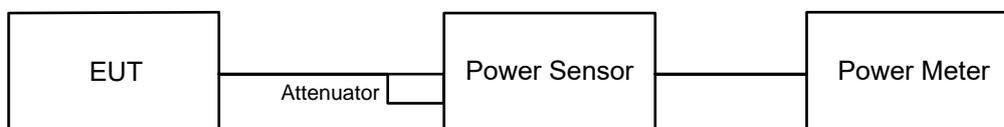
Notes:

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

6 Test Arrangements

6.1 RF Output Power

6.1.1 Test Setup



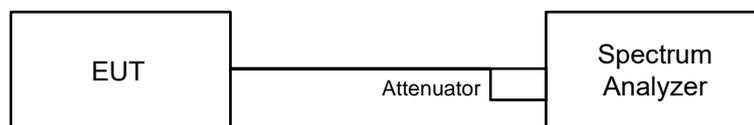
6.1.2 Test Procedure

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



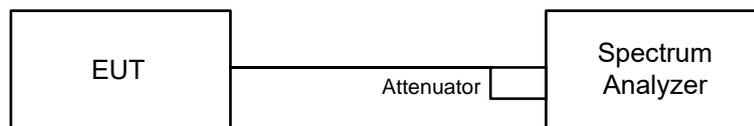
6.2.2 Test Procedure

- a. Measure the duty cycle (x).
- b. Set instrument center frequency to DTS channel center frequency.
- c. Set span to at least 1.5 times the OBW.
- d. Set RBW to: 3 kHz.
- e. Set VBW $\geq 3 \times$ RBW.
- f. Detector = power averaging (RMS) or sample detector (when RMS not available).
- g. Ensure that the number of measurement points in the sweep $\geq 2 \times$ span/RBW.
- h. Sweep time = auto couple.
- i. Do not use sweep triggering. Allow sweep to "free run".
- j. Employ trace averaging (RMS) mode over a minimum of 100 traces.
- k. Use the peak marker function to determine the maximum amplitude level.

Note: If Duty cycle < 98%, Add $10 \log (1/x)$, where x is the duty cycle measured in step (a), to the measured PSD to compute the average PSD during the actual transmission time.

6.3 6 dB Bandwidth

6.3.1 Test Setup



6.3.2 Test Procedure

- Set resolution bandwidth (RBW) = 100 kHz.
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- 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

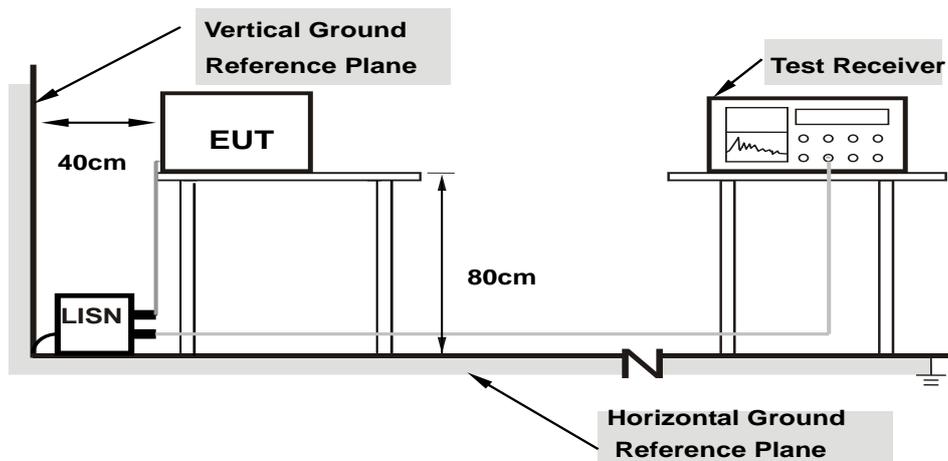
- Set the RBW = 100 kHz.
- Set the VBW ≥ 300 kHz.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOB

- Set RBW = 100 kHz.
- Set VBW ≥ 300 kHz.
- Detector = peak.
- Sweep = auto couple.
- Trace Mode = max hold.
- Allow trace to fully stabilize.
- 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

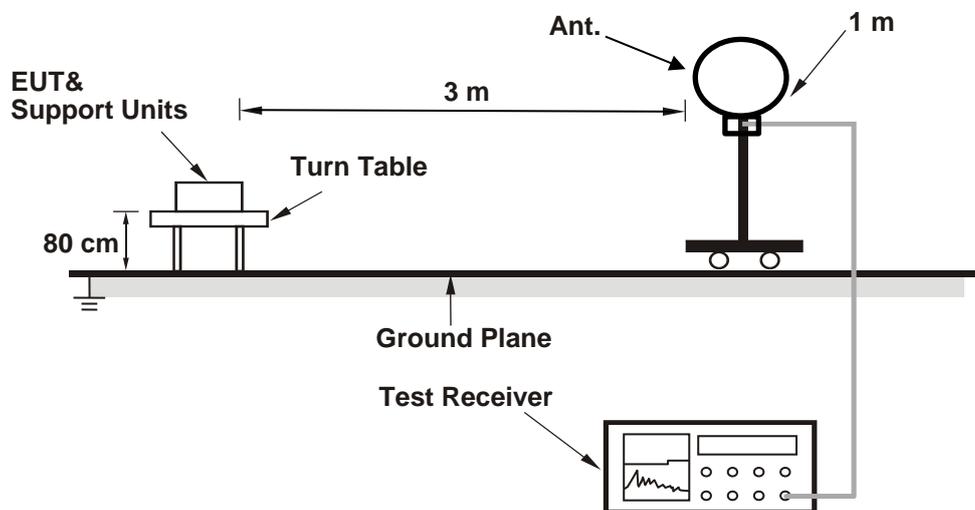
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The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

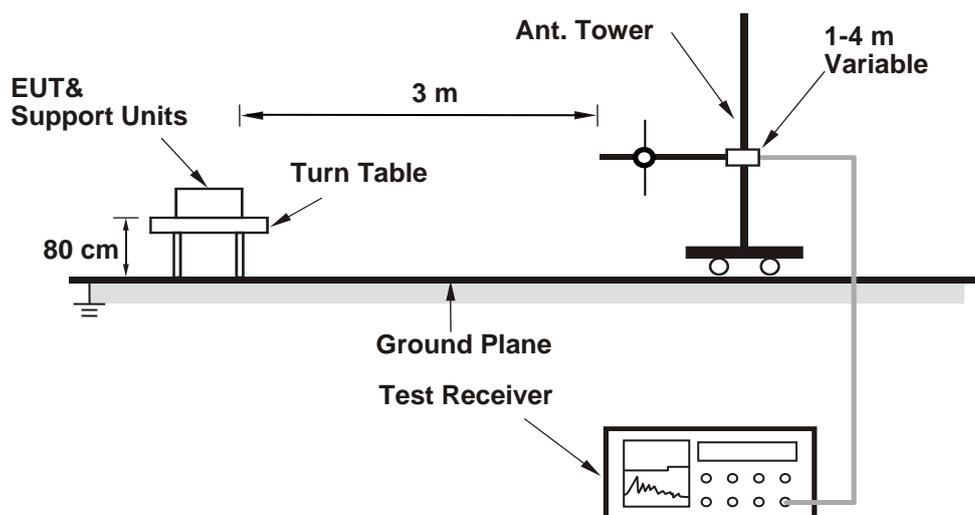
6.6 Unwanted Emissions below 1 GHz

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

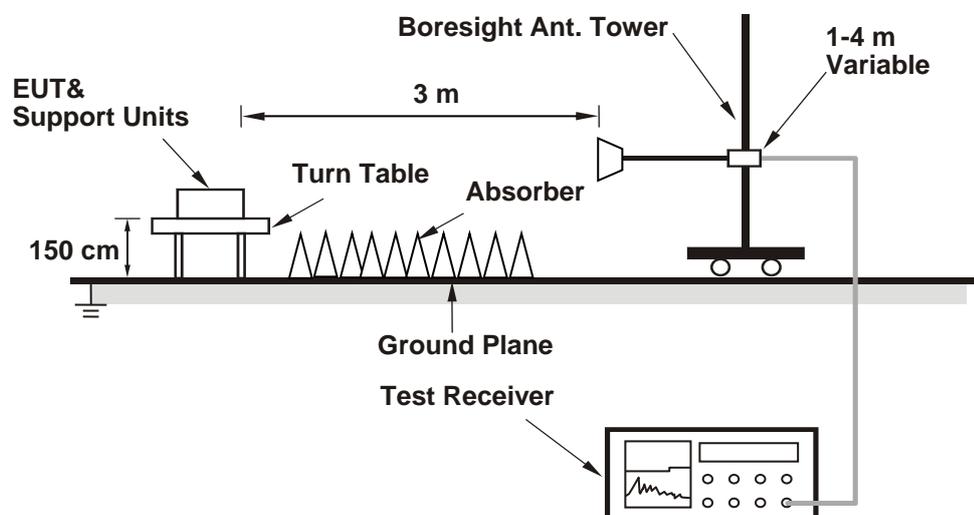
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the 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

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

- 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.
- For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is $\geq 1/T$ (Duty cycle $< 98\%$) or 10 Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1 GHz.
- 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:	5 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Bella Yeh
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802.11b

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	16.31	16.22	84.636	19.28	30	Pass
6	2437	15.25	15.33	67.616	18.30	30	Pass
11	2462	15.03	14.99	63.392	18.02	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	18.88	19.08	158.178	21.99	30	Pass
6	2437	24.04	24.15	513.529	27.11	30	Pass
11	2462	18.40	18.70	143.314	21.56	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	18.92	18.51	148.941	21.73	30	Pass
6	2437	23.81	23.63	471.111	26.73	30	Pass
11	2462	17.54	17.37	111.33	20.47	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.3 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
3	2422	17.47	17.52	112.341	20.51	30	Pass
6	2437	18.42	18.54	140.952	21.49	30	Pass
9	2452	16.64	16.30	88.79	19.48	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.3 dBi < 6 dBi, so the output power limit shall not be reduced.

7.2 Power Spectral Density

Input Power:	5 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Bella Yeh
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802.11b

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
1	2412	-14.71	-15.50	-12.08	8	Pass
6	2437	-16.19	-16.61	-13.38	8	Pass
11	2462	-16.38	-16.93	-13.64	8	Pass

Notes:

- Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- The directional gain is 5.11 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)		Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1				
1	2412	-14.35	-14.89	0.35	-11.25	8	Pass
6	2437	-10.36	-10.85	0.35	-7.24	8	Pass
11	2462	-15.48	-14.81	0.35	-11.77	8	Pass

Notes:

- Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- The directional gain is 5.11 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)		Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1				
1	2412	-14.99	-15.66	0.16	-12.14	8	Pass
6	2437	-10.50	-11.39	0.16	-7.75	8	Pass
11	2462	-16.81	-17.31	0.16	-13.88	8	Pass

Notes:

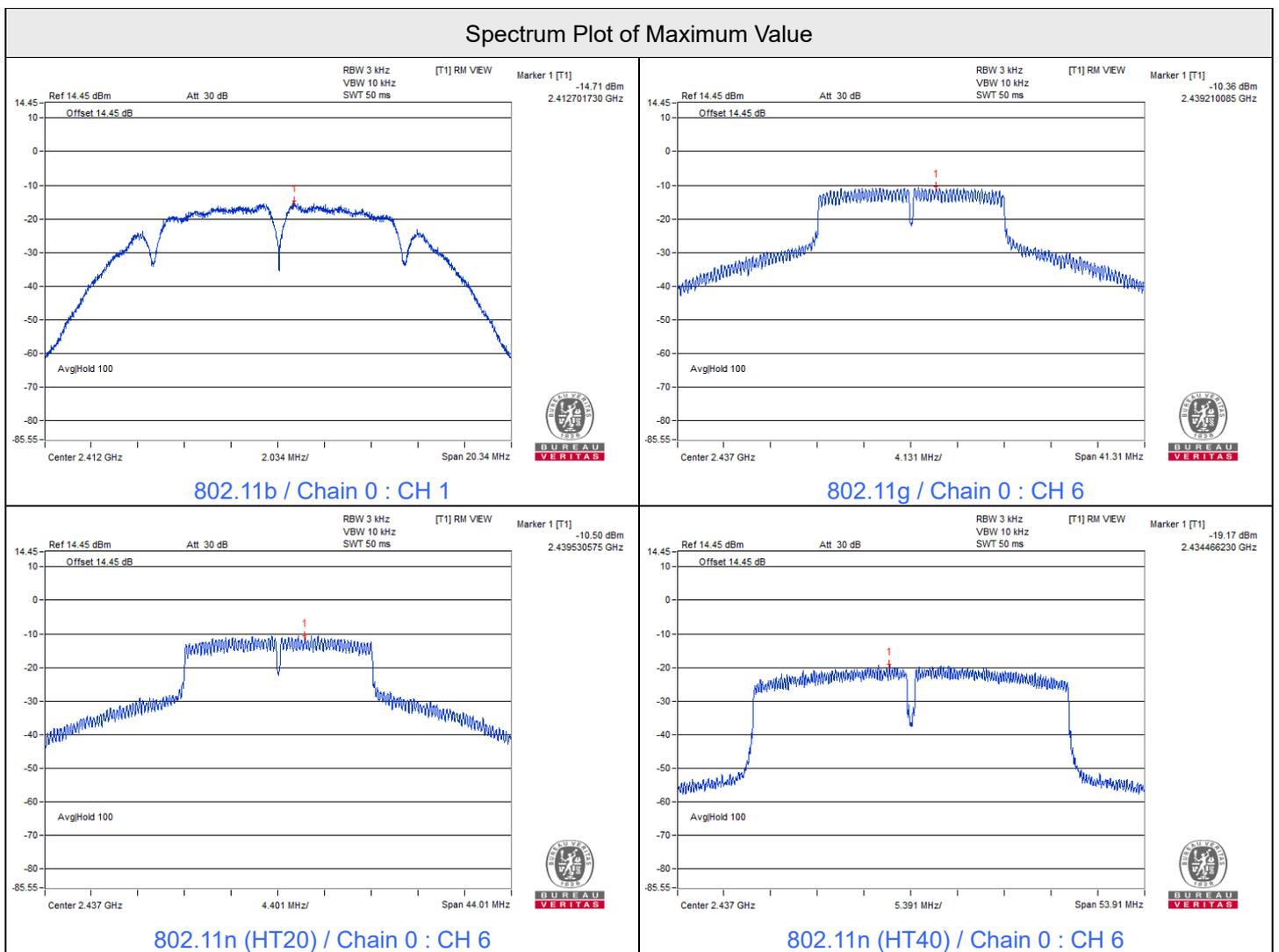
- Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- The directional gain is 5.11 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11n (HT40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)		Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1				
3	2422	-20.04	-20.99	0.29	-17.19	8	Pass
6	2437	-19.17	-19.58	0.29	-16.07	8	Pass
9	2452	-21.37	-21.93	0.29	-18.34	8	Pass

Notes:

- Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- The directional gain is 5.11 dBi < 6 dBi, so the power density limit shall not be reduced.



7.3 6 dB Bandwidth

Input Power:	5 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Bella Yeh
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802.11b

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	10.11	10.10	0.5	Pass
6	2437	10.11	10.10	0.5	Pass
11	2462	10.11	10.11	0.5	Pass

802.11g

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	16.33	16.36	0.5	Pass
6	2437	16.31	16.32	0.5	Pass
11	2462	16.33	16.37	0.5	Pass

802.11n (HT20)

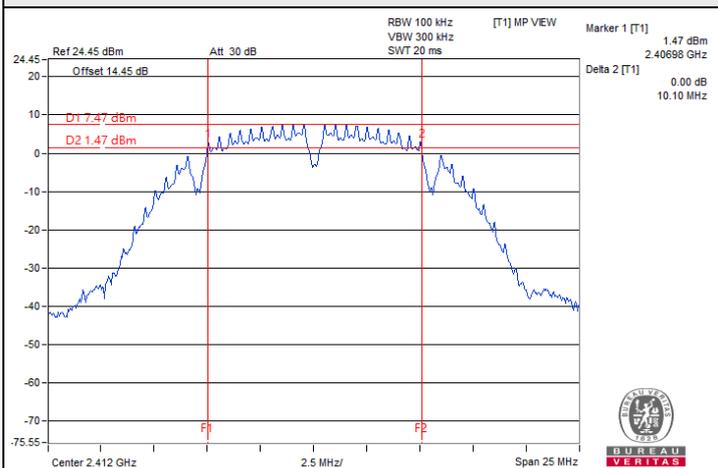
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	17.31	17.07	0.5	Pass
6	2437	16.95	16.68	0.5	Pass
11	2462	17.33	17.31	0.5	Pass

802.11n (HT40)

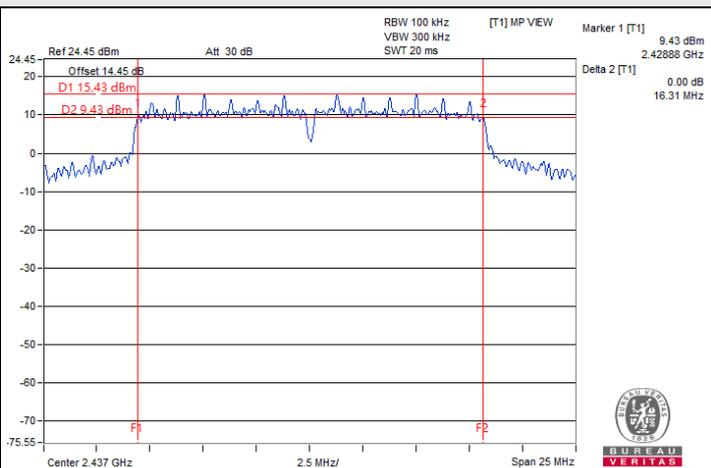
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
3	2422	35.14	35.16	0.5	Pass
6	2437	35.14	35.16	0.5	Pass
9	2452	35.16	35.17	0.5	Pass



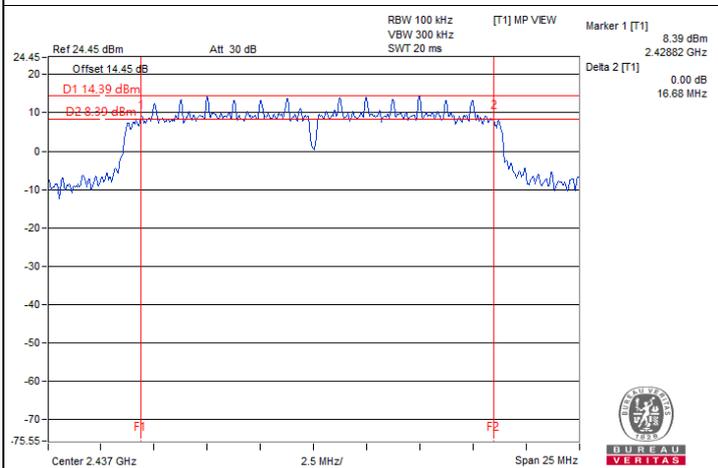
Spectrum Plot of Minimum Value



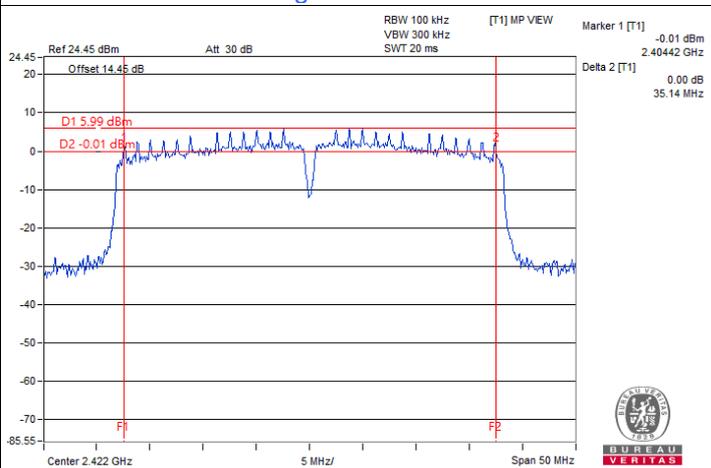
802.11b / Chain 1 : CH 1



802.11g / Chain 0 : CH 6



802.11n (HT20) / Chain 1 : CH 6



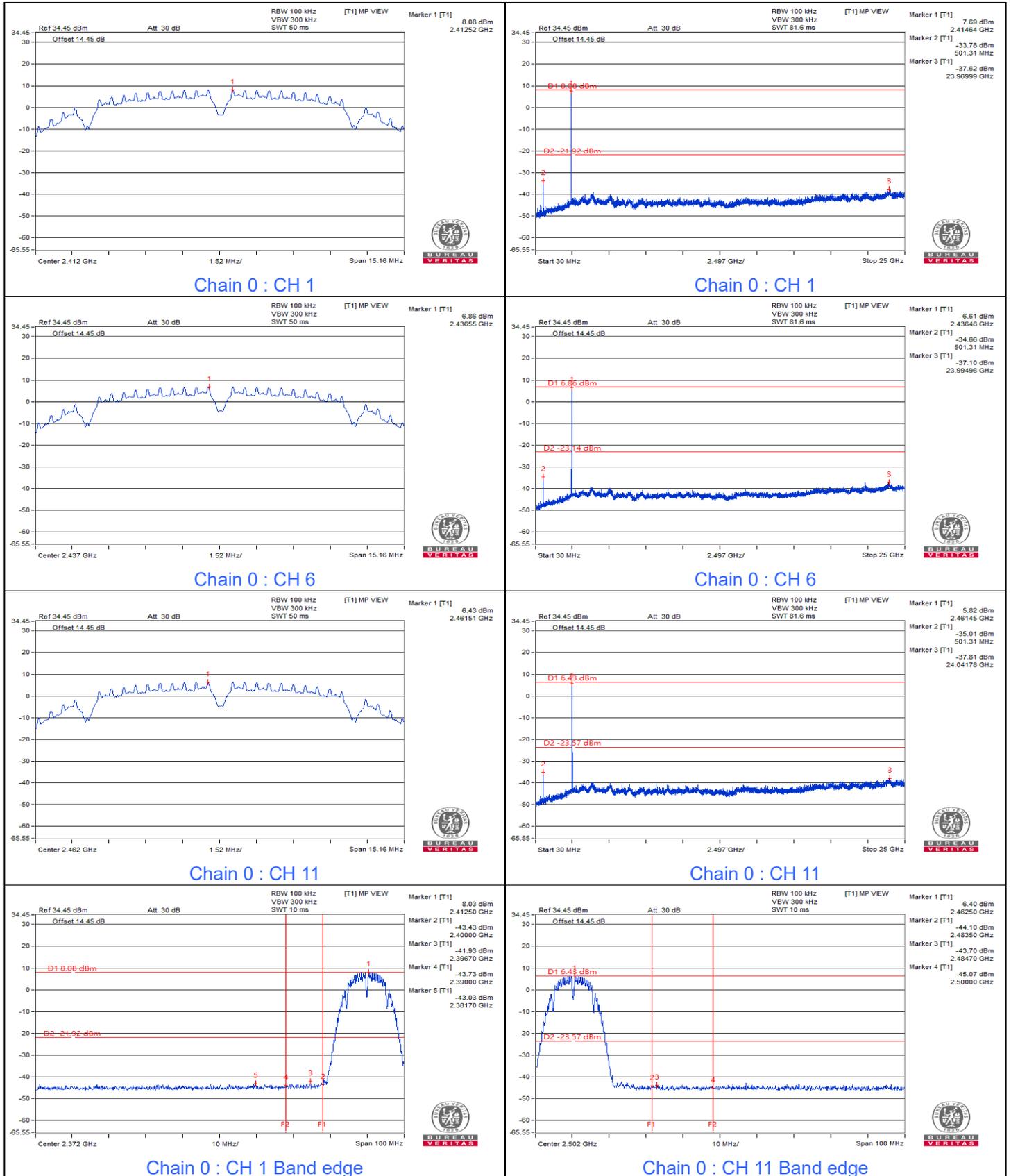
802.11n (HT40) / Chain 0 : CH 3

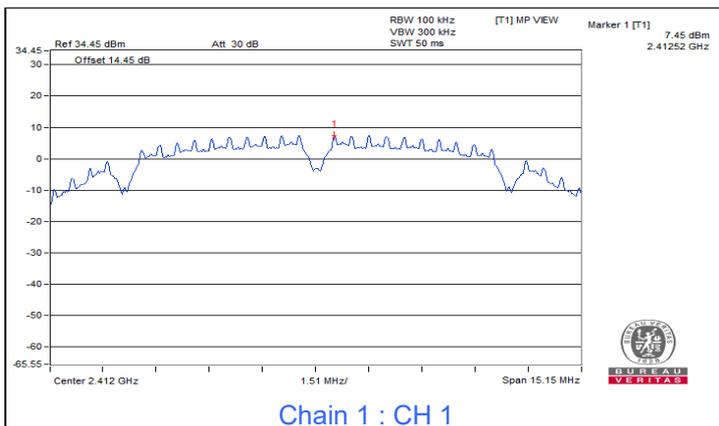


7.4 Conducted Out of Band Emissions

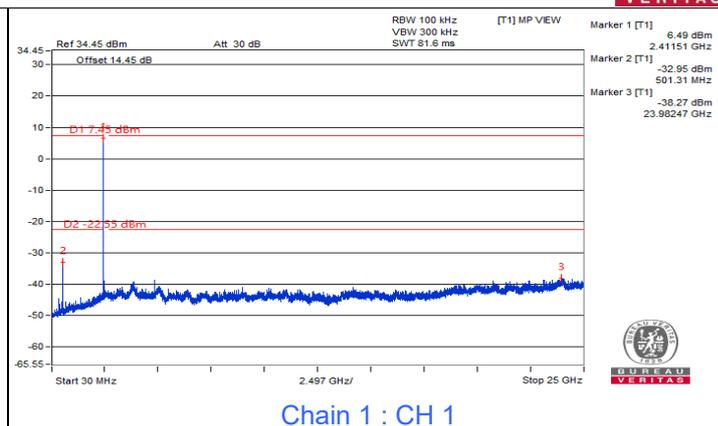
Input Power:	5 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Bella Yeh
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802.11b

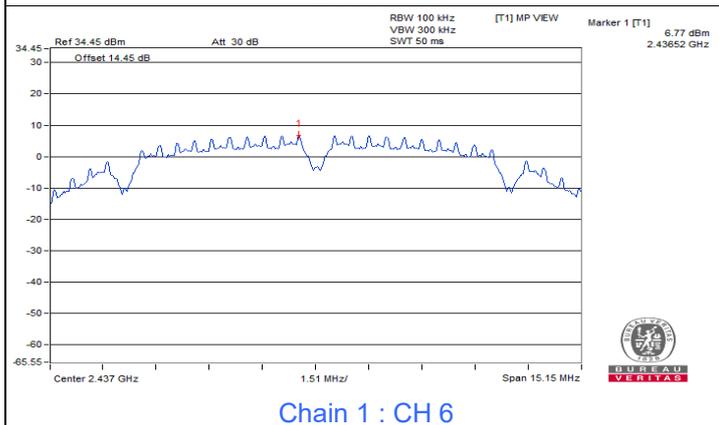




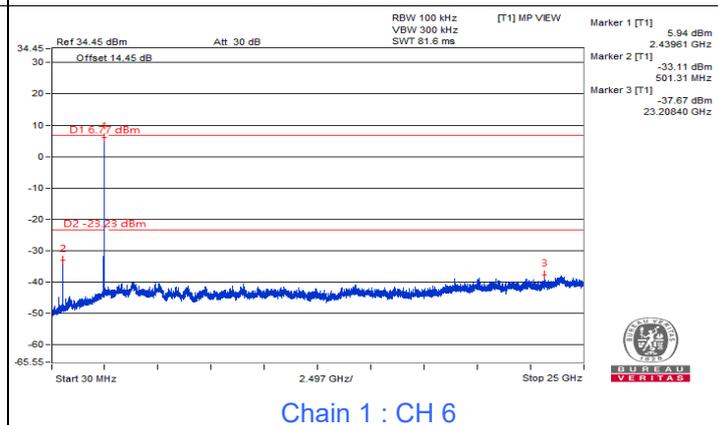
Chain 1 : CH 1



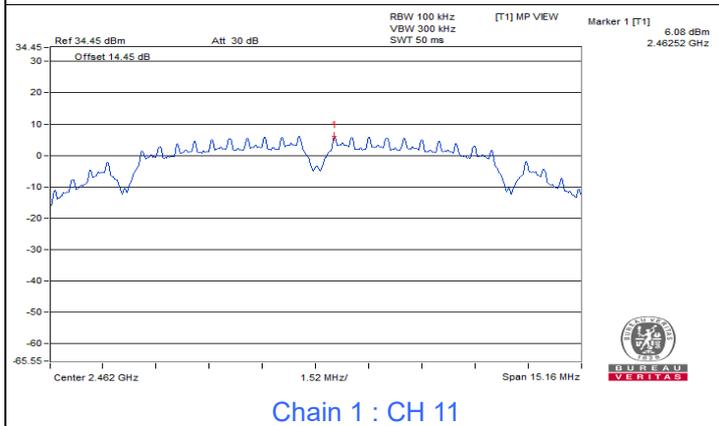
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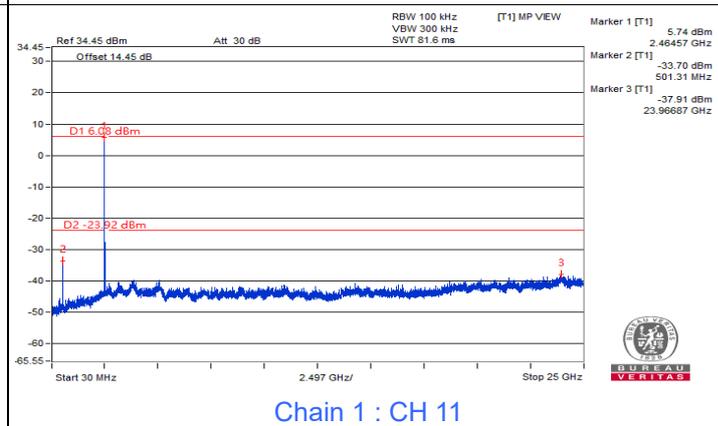
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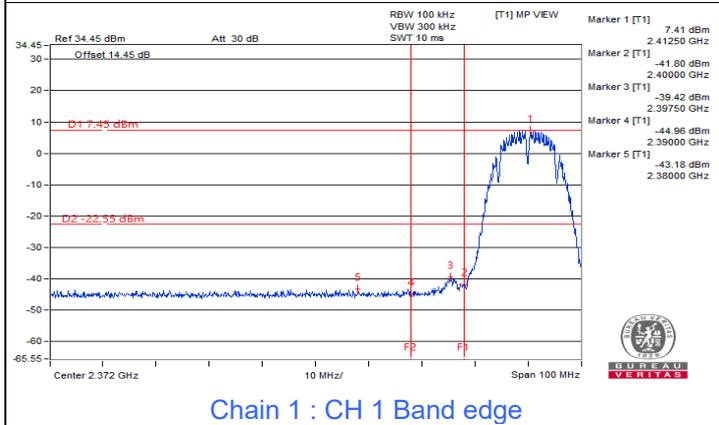
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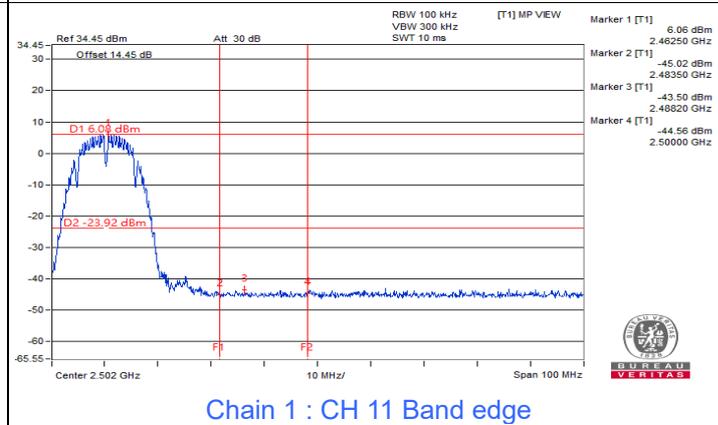
Chain 1 : CH 11



Chain 1 : CH 11



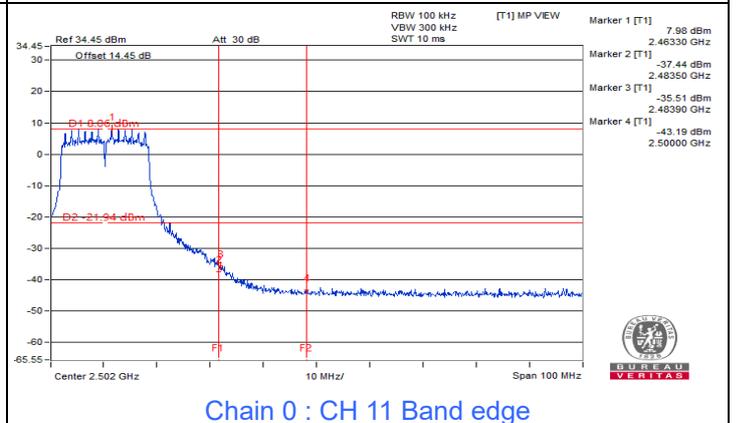
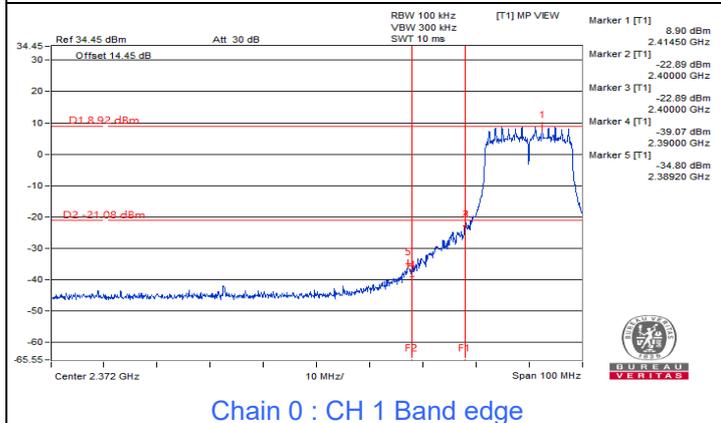
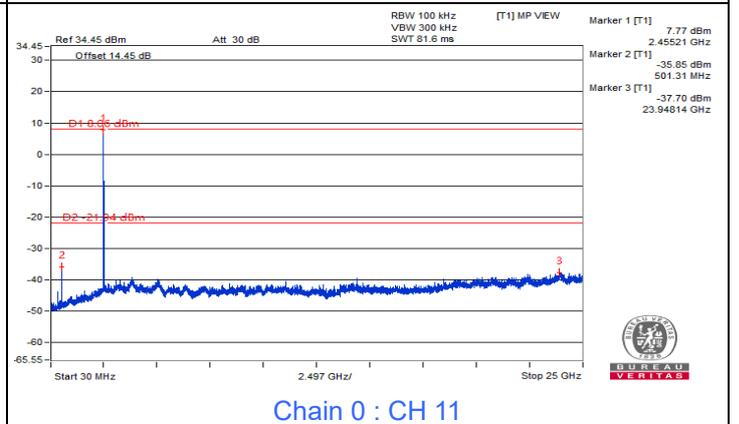
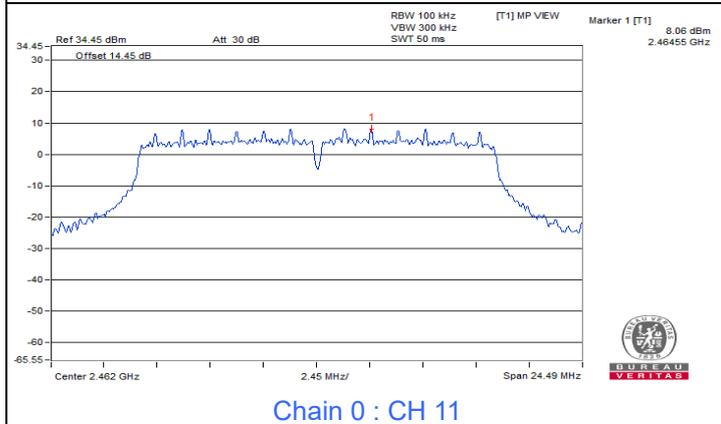
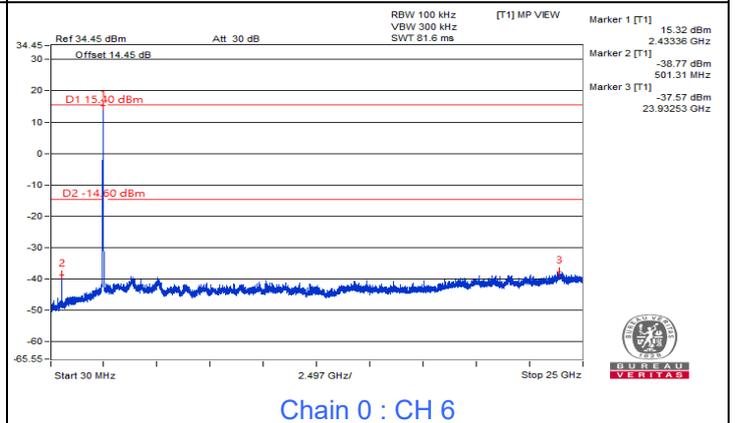
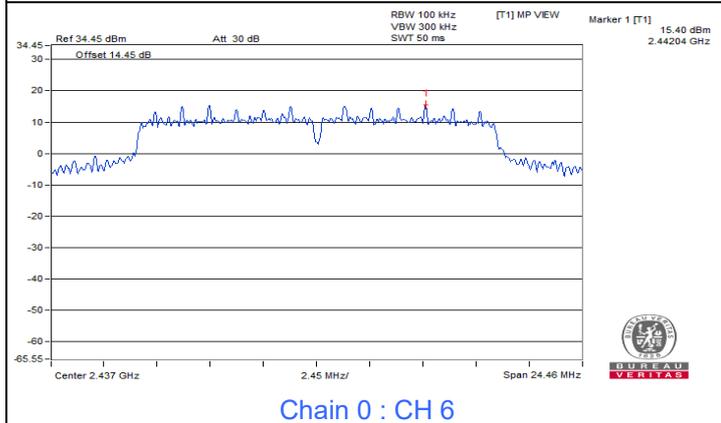
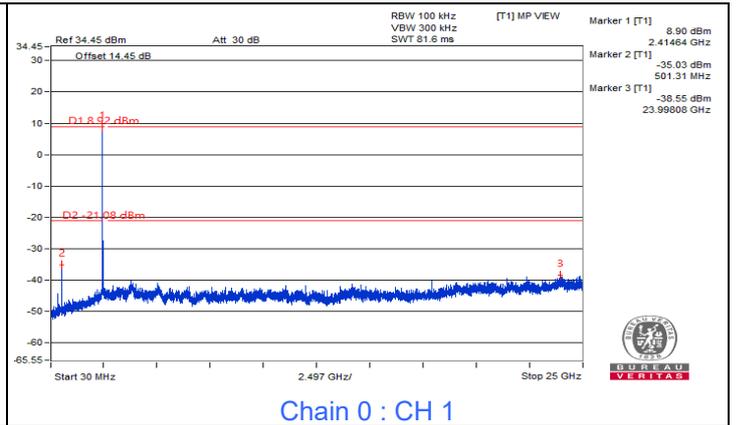
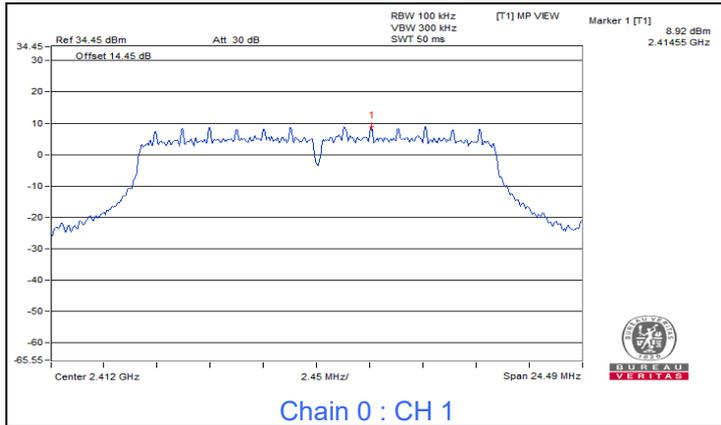
Chain 1 : CH 1 Band edge

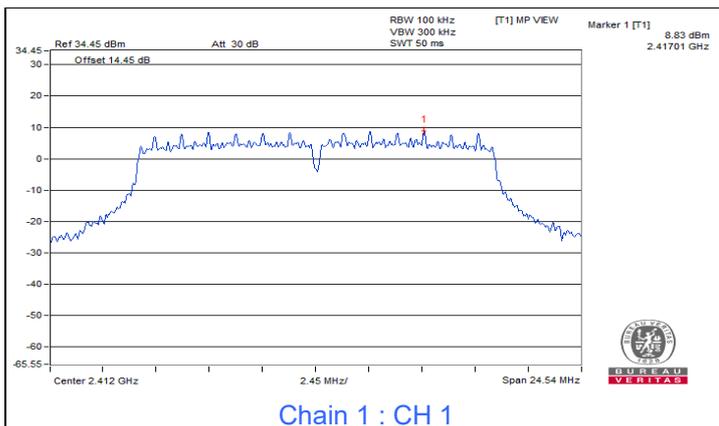


Chain 1 : CH 11 Band edge

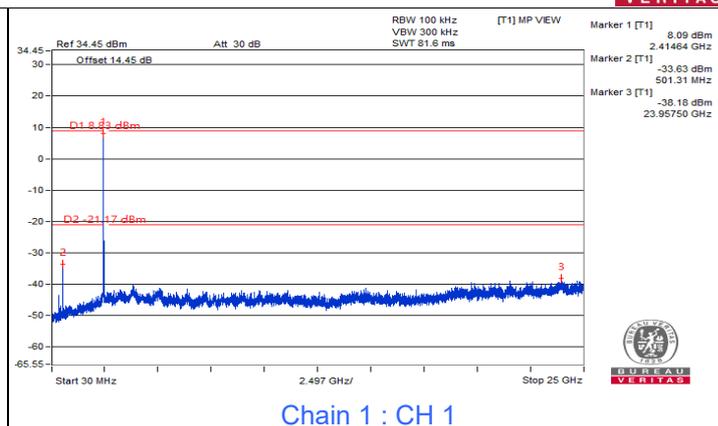


802.11g

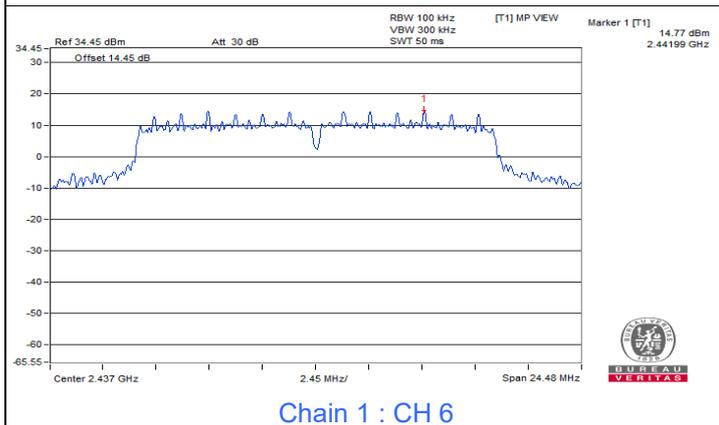




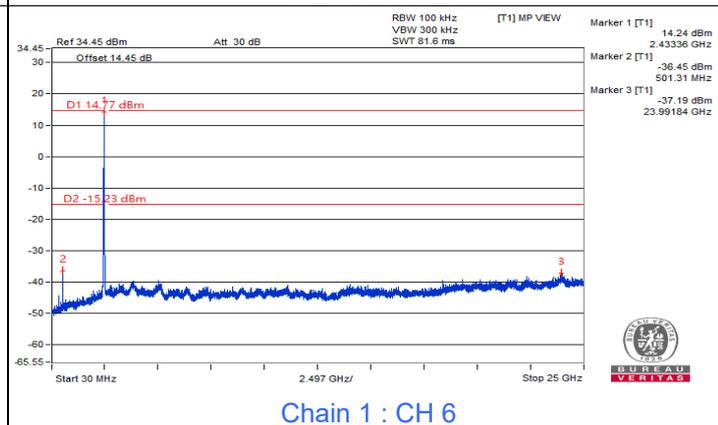
Chain 1 : CH 1



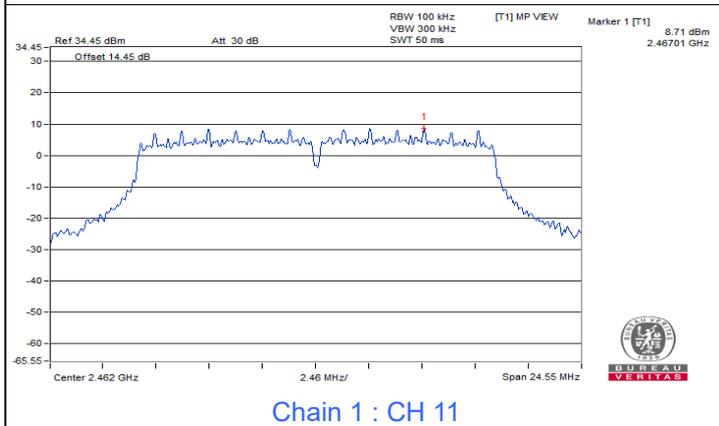
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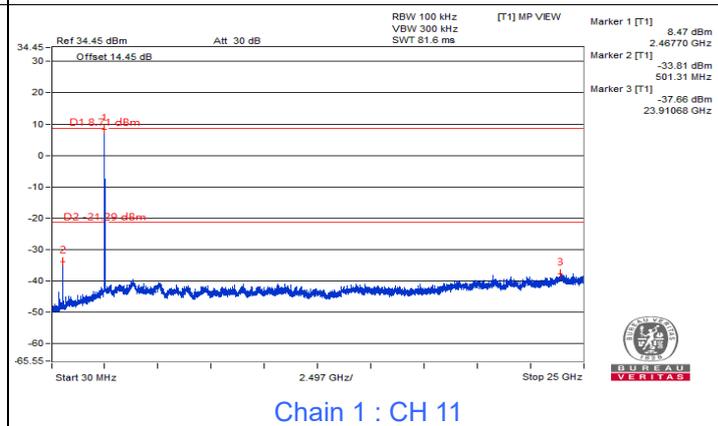
Chain 1 : CH 6



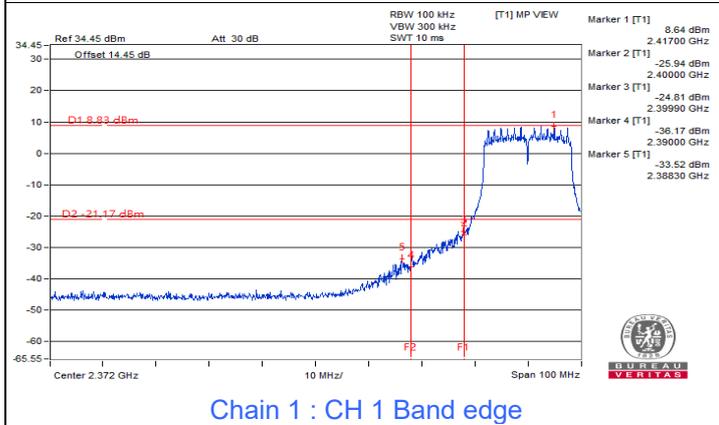
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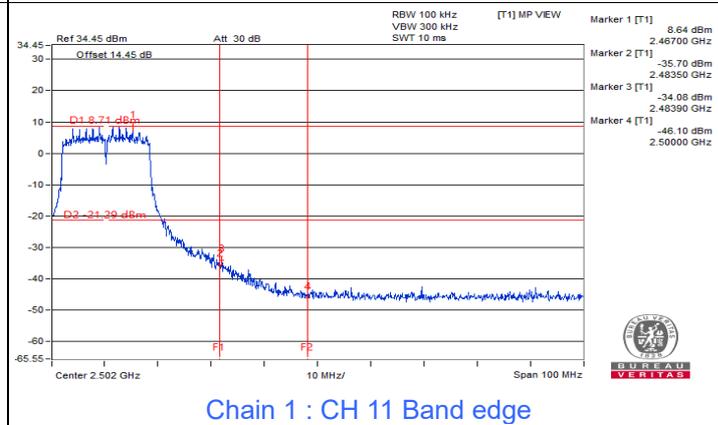
Chain 1 : CH 11



Chain 1 : CH 11



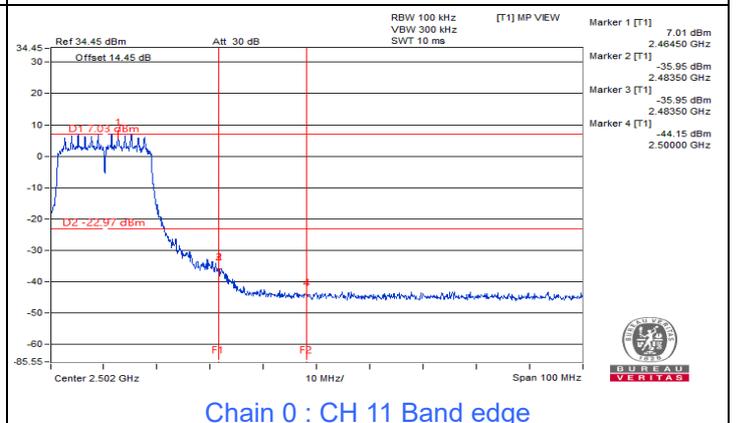
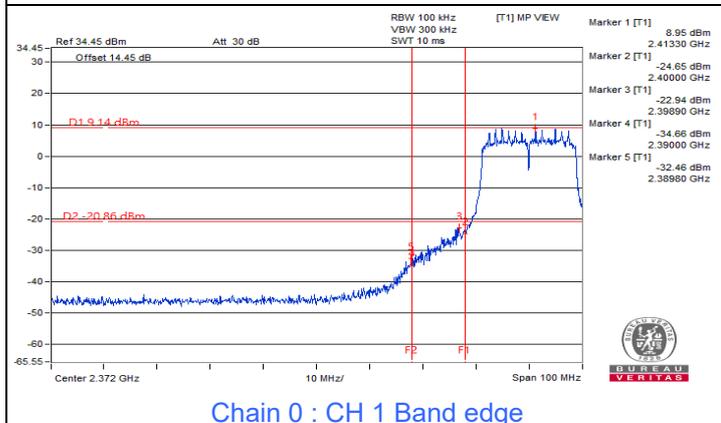
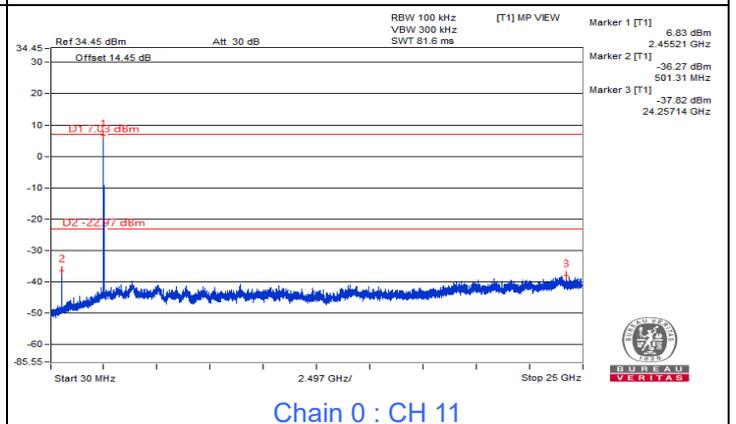
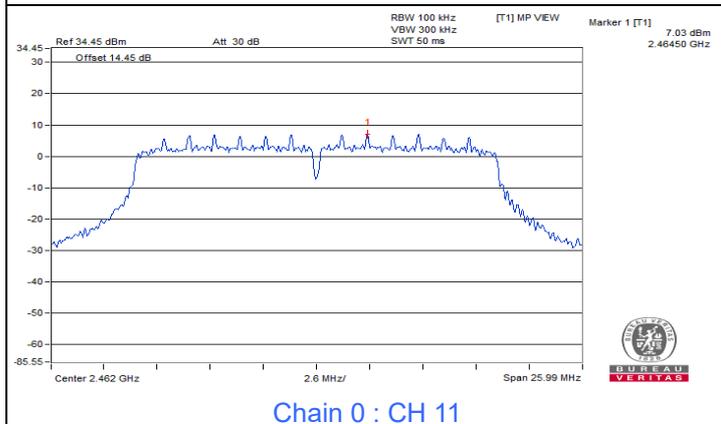
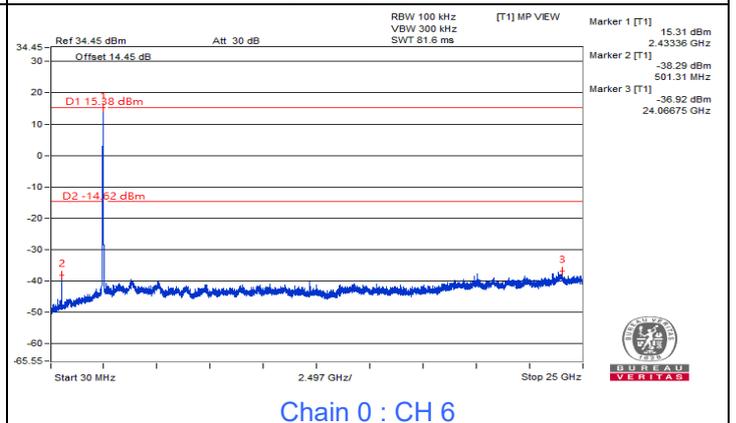
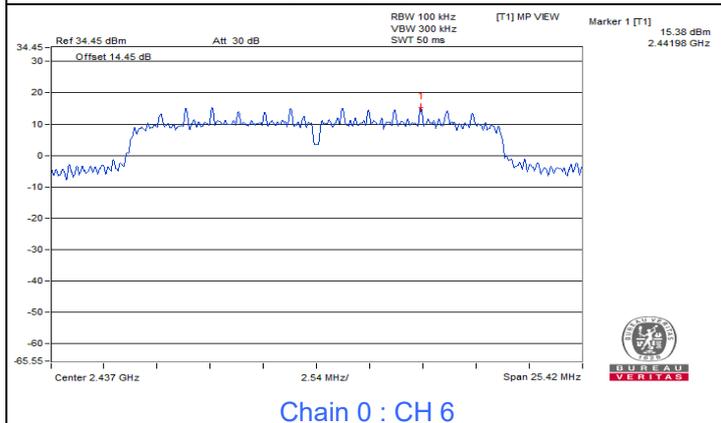
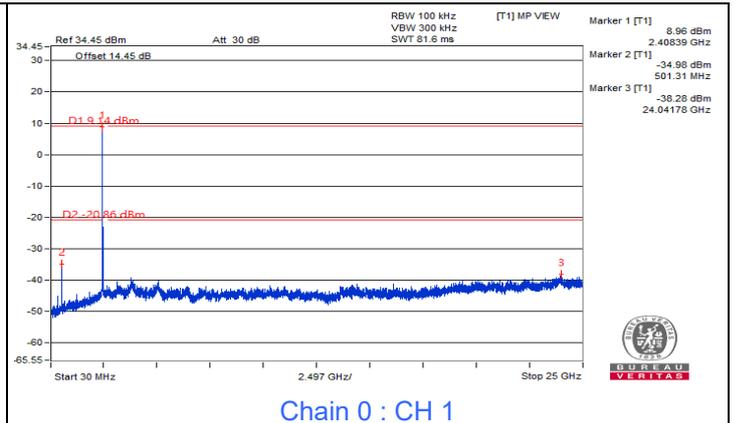
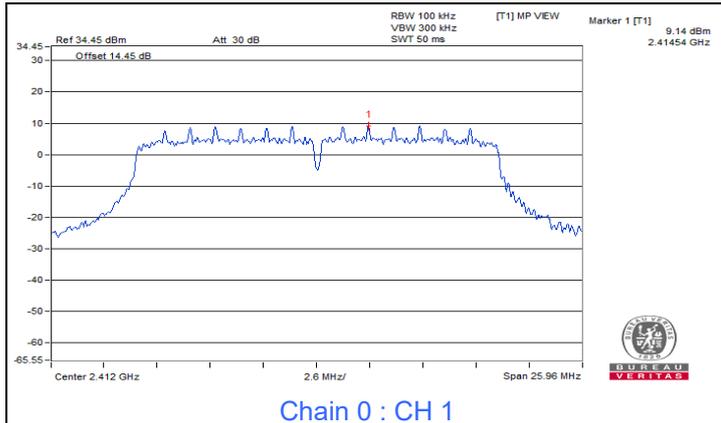
Chain 1 : CH 1 Band edge

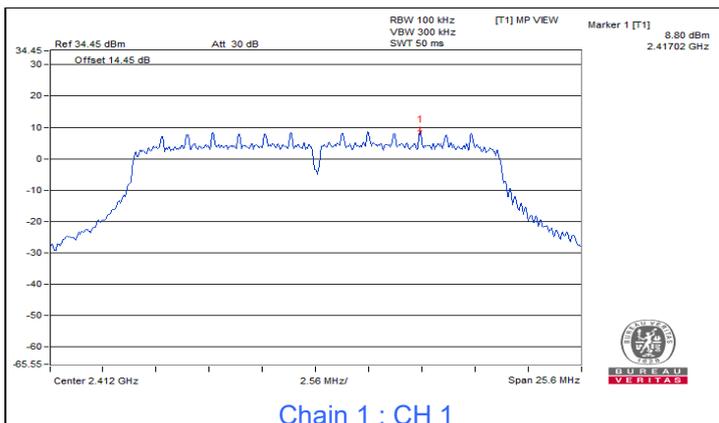


Chain 1 : CH 11 Band edge

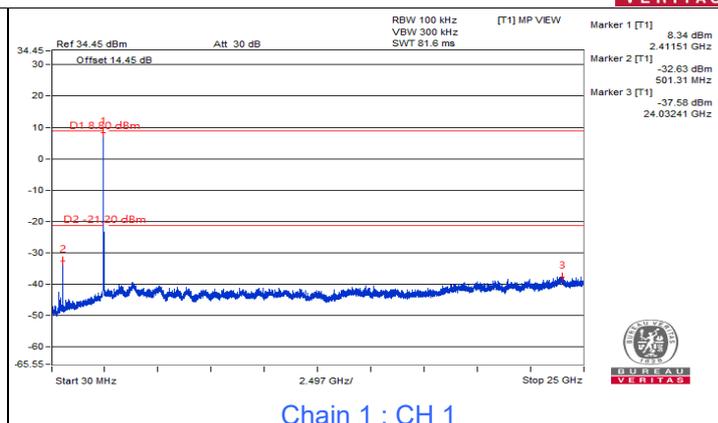


802.11n (HT20)

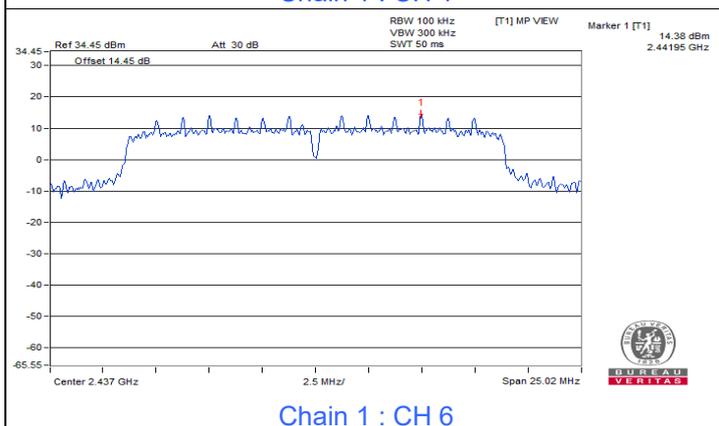




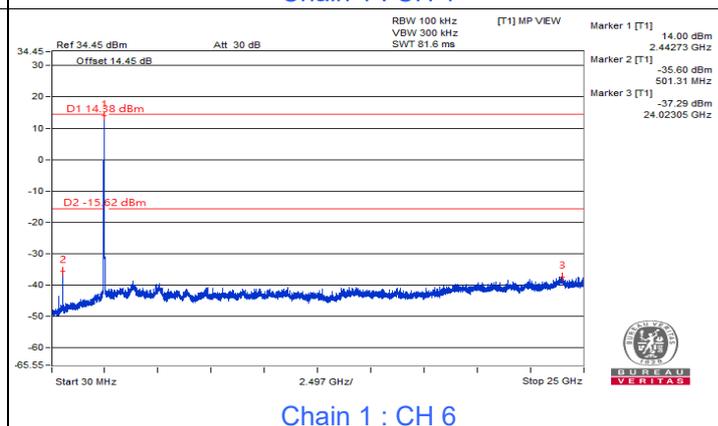
Chain 1 : CH 1



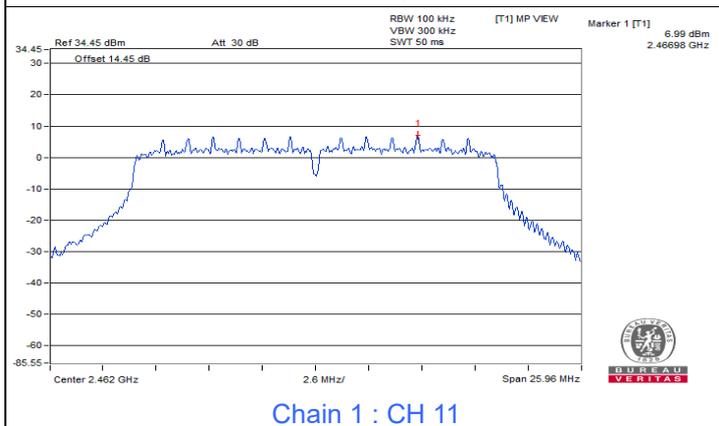
Chain 1 : CH 1



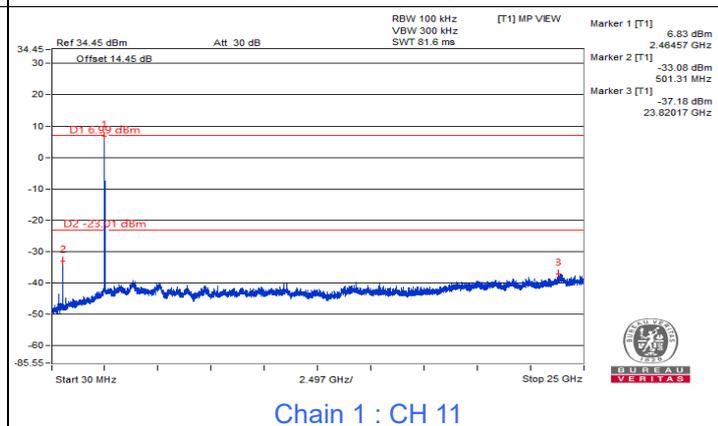
Chain 1 : CH 6



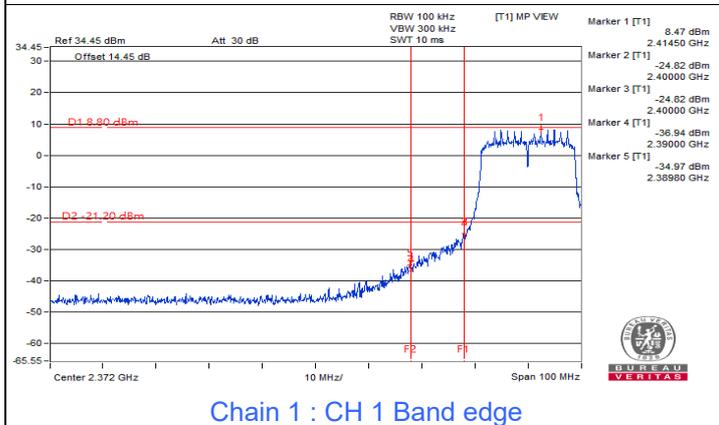
Chain 1 : CH 6



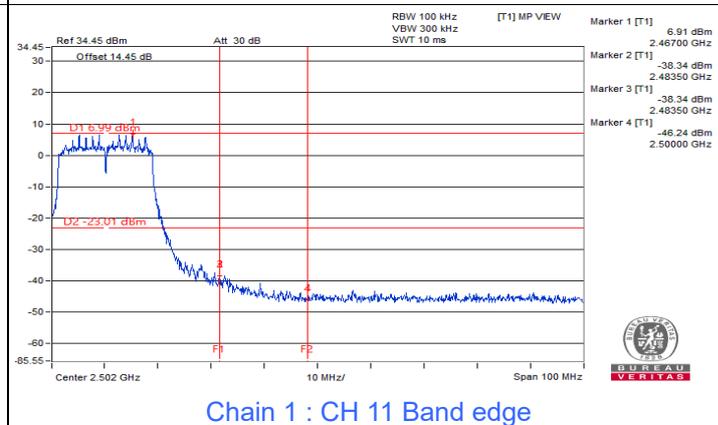
Chain 1 : CH 11



Chain 1 : CH 11



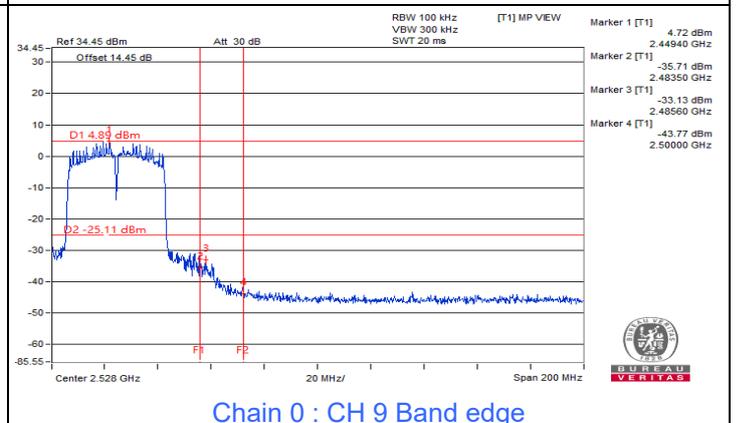
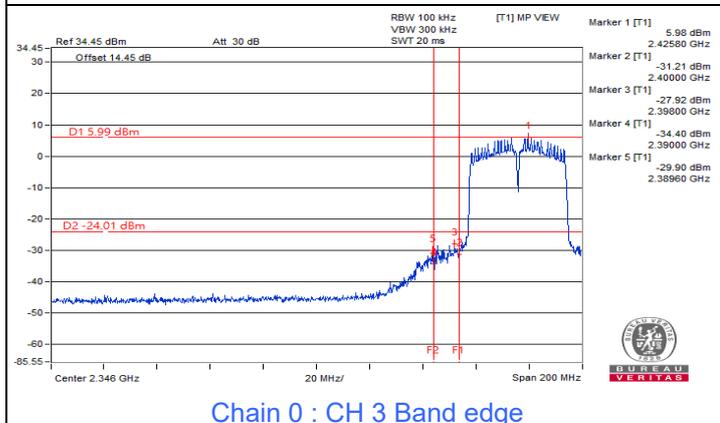
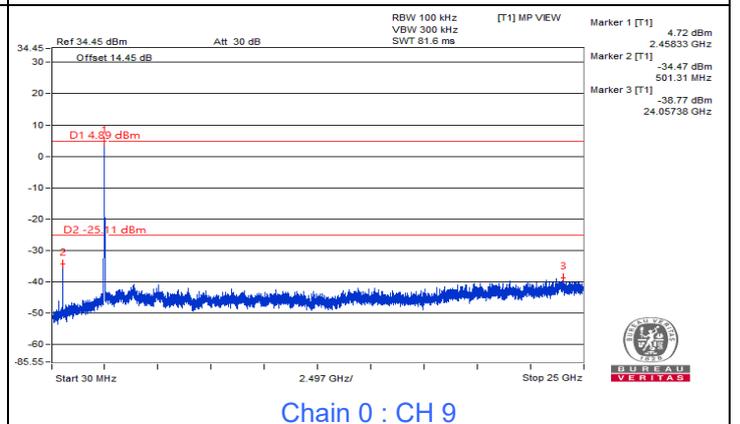
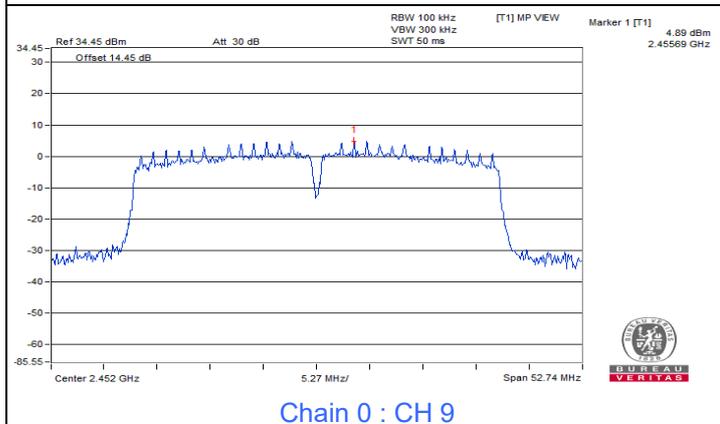
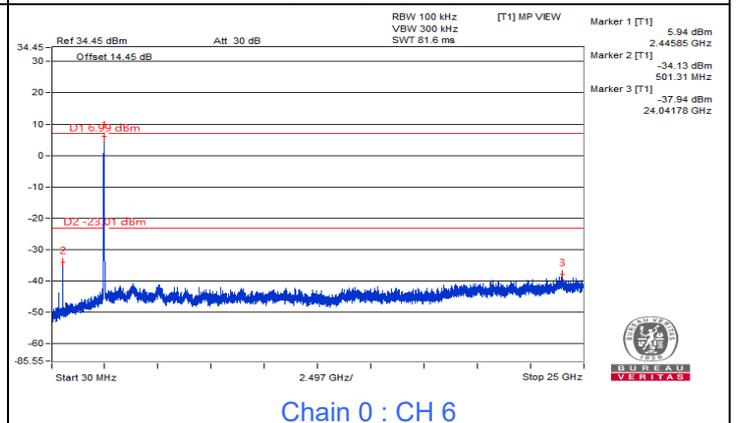
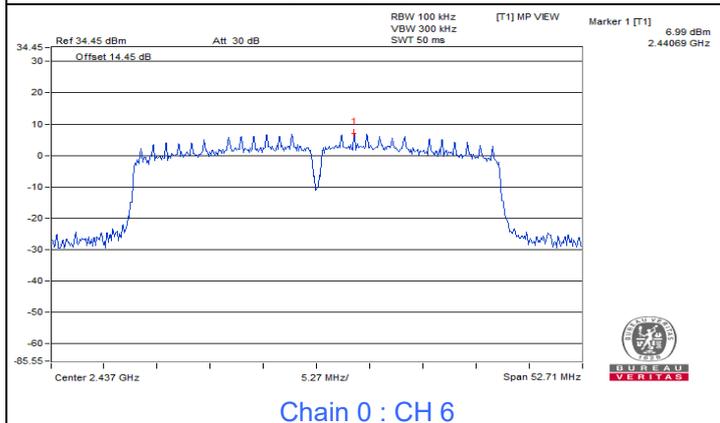
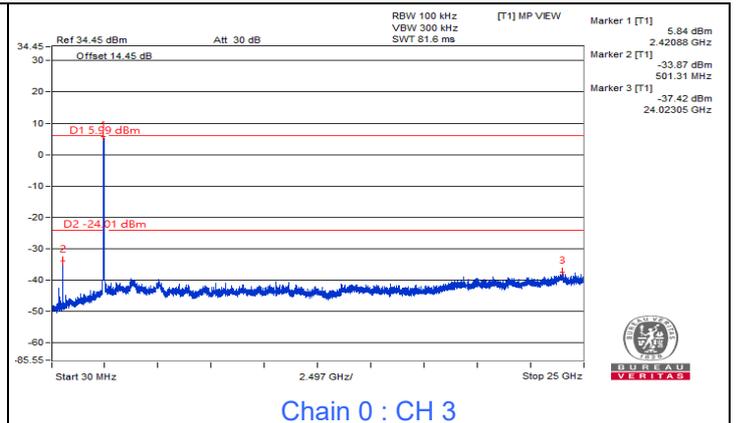
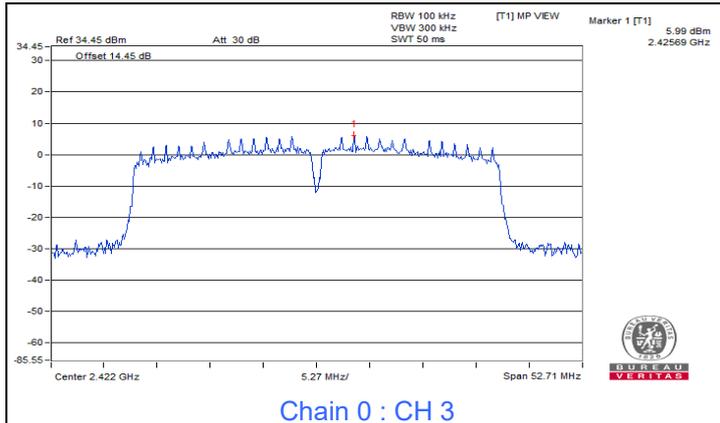
Chain 1 : CH 1 Band edge

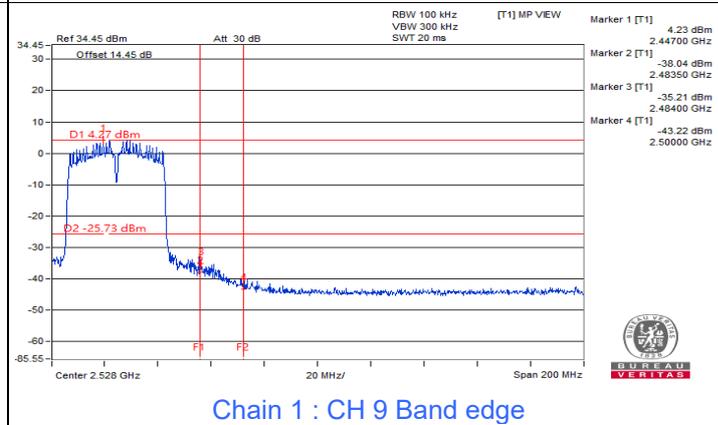
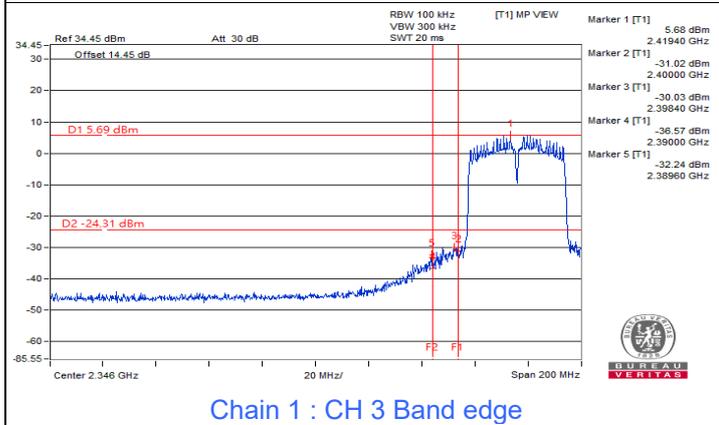
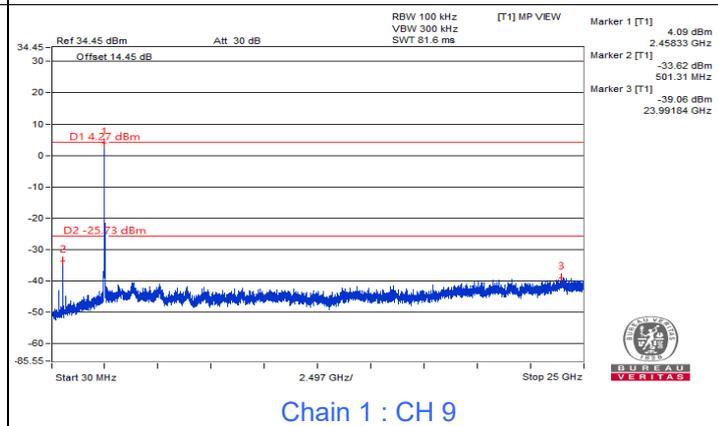
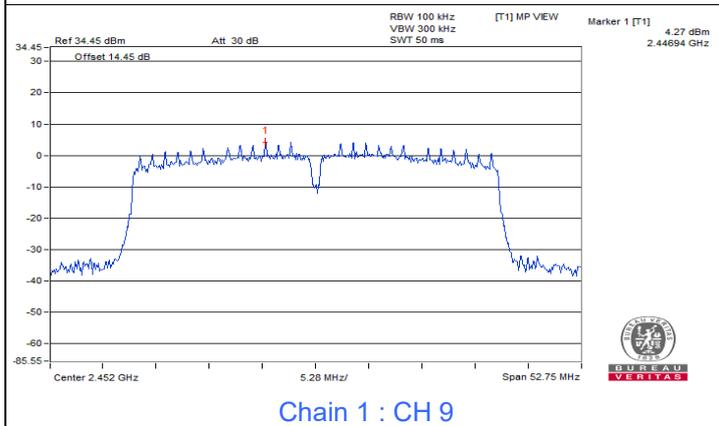
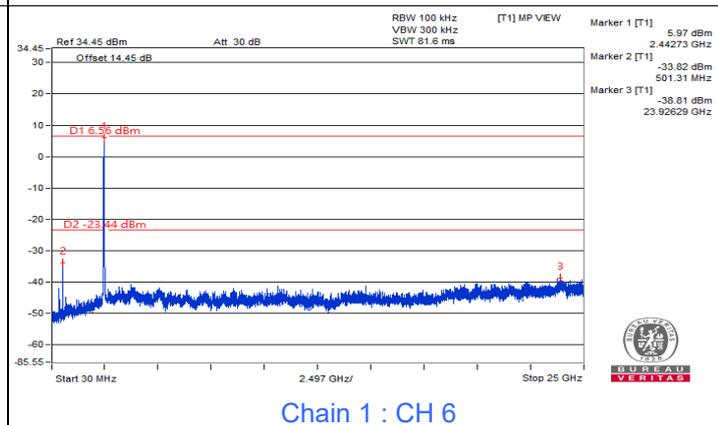
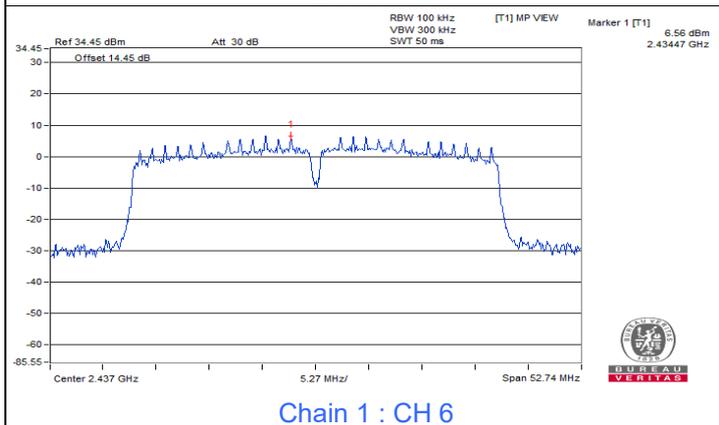
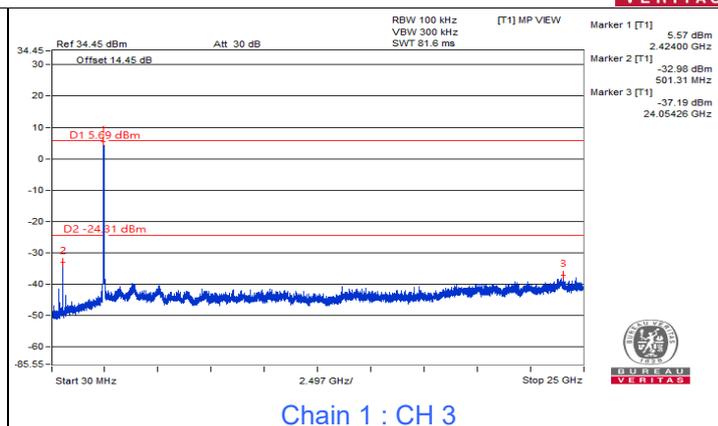
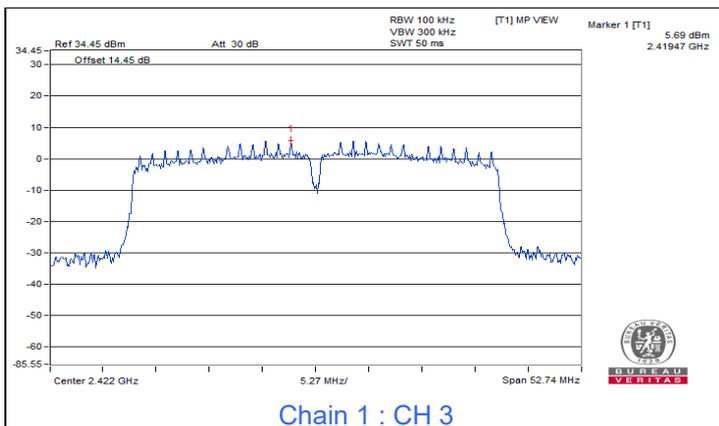


Chain 1 : CH 11 Band edge



802.11n (HT40)





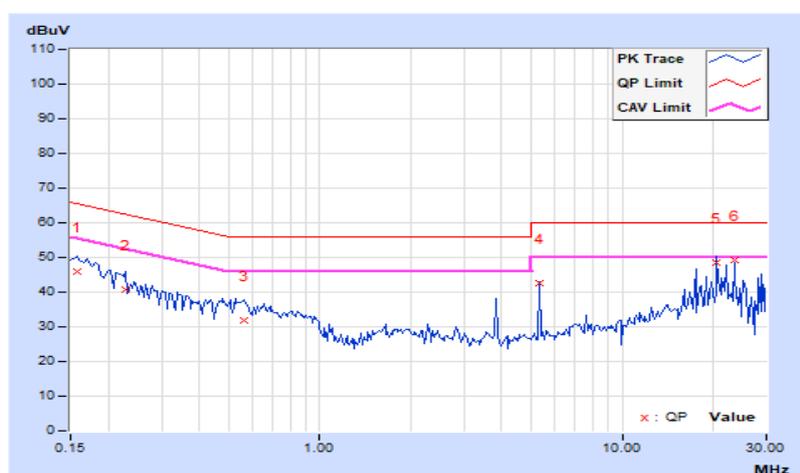
7.5 AC Power Conducted Emissions

RF Mode	802.11g	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	Tank Wu		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15781	10.00	35.97	24.99	45.97	34.99	65.58	55.58	-19.61	-20.59
2	0.22812	10.03	30.59	16.81	40.62	26.84	62.52	52.52	-21.90	-25.68
3	0.56016	10.05	21.74	13.70	31.79	23.75	56.00	46.00	-24.21	-22.25
4	5.33594	10.39	32.11	28.00	42.50	38.39	60.00	50.00	-17.50	-11.61
5	20.58203	11.14	37.48	33.05	48.62	44.19	60.00	50.00	-11.38	-5.81
6	23.63281	11.18	38.01	33.53	49.19	44.71	60.00	50.00	-10.81	-5.29

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

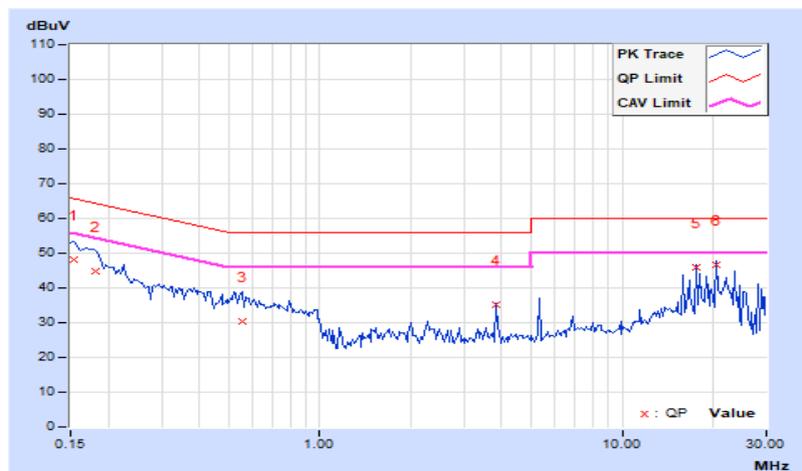


RF Mode	802.11g	Channel	CH 6 : 2437 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	10.02	38.30	22.66	48.32	32.68	65.79	55.79	-17.47	-23.11
2	0.18125	10.02	34.96	20.32	44.98	30.34	64.43	54.43	-19.45	-24.09
3	0.55625	10.04	20.16	10.27	30.20	20.31	56.00	46.00	-25.80	-25.69
4	3.80859	10.26	25.04	21.70	35.30	31.96	56.00	46.00	-20.70	-14.04
5	17.52734	10.92	34.86	28.68	45.78	39.60	60.00	50.00	-14.22	-10.40
6	20.57813	11.01	35.64	29.31	46.65	40.32	60.00	50.00	-13.35	-9.68

Remarks:

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



7.6 Unwanted Emissions below 1 GHz

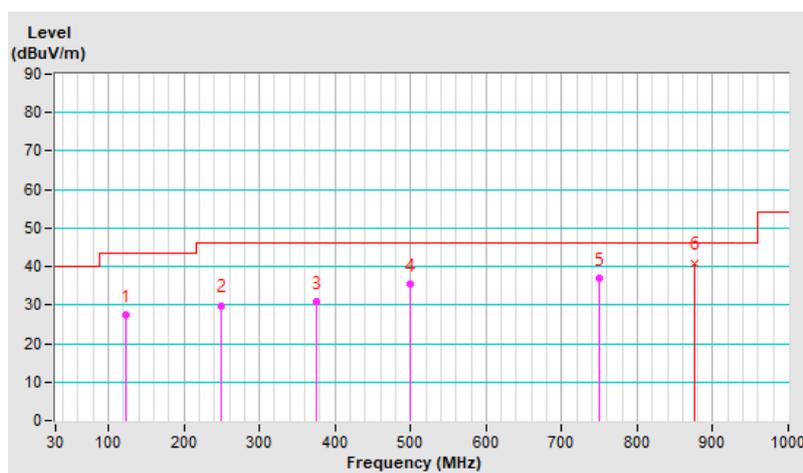
RF Mode	802.11g	Channel	CH 6 : 2437 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65% RH
Tested By	Tank Wu		

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	123.36	27.6 QP	43.5	-15.9	2.00 H	81	42.2	-14.6
2	250.02	29.9 QP	46.0	-16.1	1.00 H	93	44.0	-14.1
3	375.00	31.0 QP	46.0	-15.0	1.00 H	123	41.5	-10.5
4	499.99	35.3 QP	46.0	-10.7	2.00 H	225	42.6	-7.3
5	750.01	37.1 QP	46.0	-8.9	1.00 H	202	39.1	-2.0
6	874.99	41.0 QP	46.0	-5.0	1.00 H	360	41.6	-0.6

Remarks:

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

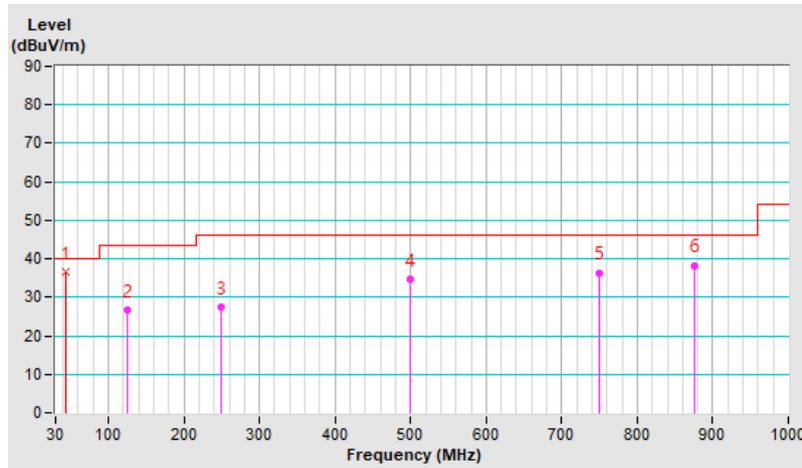


RF Mode	802.11g	Channel	CH 6 : 2437 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65% RH
Tested By	Tank Wu		

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	42.96	36.6 QP	40.0	-3.4	1.00 V	347	49.7	-13.1
2	125.01	26.7 QP	43.5	-16.8	1.00 V	201	41.1	-14.4
3	250.00	27.3 QP	46.0	-18.7	1.00 V	156	41.4	-14.1
4	499.99	34.8 QP	46.0	-11.2	2.00 V	188	42.1	-7.3
5	750.01	36.4 QP	46.0	-9.6	2.00 V	187	38.4	-2.0
6	874.99	38.3 QP	46.0	-7.7	1.00 V	187	38.9	-0.6

Remarks:

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



7.7 Unwanted Emissions above 1 GHz

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

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	56.1 PK	74.0	-17.9	2.68 H	139	56.5	-0.4
2	2390.00	43.8 AV	54.0	-10.2	2.68 H	139	44.2	-0.4
3	*2412.00	107.1 PK			2.68 H	139	107.7	-0.6
4	*2412.00	104.9 AV			2.68 H	139	105.5	-0.6
5	4824.00	51.3 PK	74.0	-22.7	1.11 H	346	47.0	4.3
6	4824.00	49.9 AV	54.0	-4.1	1.11 H	346	45.6	4.3
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	55.8 PK	74.0	-18.2	2.23 V	127	56.2	-0.4
2	2390.00	43.5 AV	54.0	-10.5	2.23 V	127	43.9	-0.4
3	*2412.00	104.5 PK			2.23 V	127	105.1	-0.6
4	*2412.00	102.6 AV			2.23 V	127	103.2	-0.6
5	4824.00	53.2 PK	74.0	-20.8	1.18 V	319	48.9	4.3
6	4824.00	51.8 AV	54.0	-2.2	1.18 V	319	47.5	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 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	56.1 PK	74.0	-17.9	2.48 H	133	56.5	-0.4
2	2390.00	43.6 AV	54.0	-10.4	2.48 H	133	44.0	-0.4
3	*2437.00	106.5 PK			2.48 H	133	107.0	-0.5
4	*2437.00	104.4 AV			2.48 H	133	104.9	-0.5
5	2483.50	55.4 PK	74.0	-18.6	2.48 H	133	56.1	-0.7
6	2483.50	43.9 AV	54.0	-10.1	2.48 H	133	44.6	-0.7
7	4874.00	51.6 PK	74.0	-22.4	1.07 H	334	47.2	4.4
8	4874.00	50.1 AV	54.0	-3.9	1.07 H	334	45.7	4.4
9	7311.00	47.1 PK	74.0	-26.9	1.26 H	307	36.2	10.9
10	7311.00	35.7 AV	54.0	-18.3	1.26 H	307	24.8	10.9
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	3.04 V	176	55.6	-0.4
2	2390.00	43.5 AV	54.0	-10.5	3.04 V	176	43.9	-0.4
3	*2437.00	104.6 PK			3.04 V	176	105.1	-0.5
4	*2437.00	102.5 AV			3.04 V	176	103.0	-0.5
5	2483.50	54.8 PK	74.0	-19.2	3.04 V	176	55.5	-0.7
6	2483.50	43.2 AV	54.0	-10.8	3.04 V	176	43.9	-0.7
7	4874.00	53.8 PK	74.0	-20.2	1.21 V	337	49.4	4.4
8	4874.00	51.7 AV	54.0	-2.3	1.21 V	337	47.3	4.4
9	7311.00	46.5 PK	74.0	-27.5	1.35 V	324	35.6	10.9
10	7311.00	34.6 AV	54.0	-19.4	1.35 V	324	23.7	10.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	106.2 PK			2.58 H	141	106.9	-0.7
2	*2462.00	104.2 AV			2.58 H	141	104.9	-0.7
3	2483.50	57.1 PK	74.0	-16.9	2.58 H	141	57.8	-0.7
4	2483.50	44.2 AV	54.0	-9.8	2.58 H	141	44.9	-0.7
5	4924.00	51.5 PK	74.0	-22.5	1.22 H	307	47.0	4.5
6	4924.00	49.8 AV	54.0	-4.2	1.22 H	307	45.3	4.5
7	7386.00	46.6 PK	74.0	-27.4	1.31 H	301	35.4	11.2
8	7386.00	35.2 AV	54.0	-18.8	1.31 H	301	24.0	11.2
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	103.9 PK			2.94 V	178	104.6	-0.7
2	*2462.00	101.8 AV			2.94 V	178	102.5	-0.7
3	2483.50	55.1 PK	74.0	-18.9	2.94 V	178	55.8	-0.7
4	2483.50	43.1 AV	54.0	-10.9	2.94 V	178	43.8	-0.7
5	4924.00	53.2 PK	74.0	-20.8	1.20 V	348	48.7	4.5
6	4924.00	51.7 AV	54.0	-2.3	1.20 V	348	47.2	4.5
7	7386.00	46.3 PK	74.0	-27.7	1.37 V	312	35.1	11.2
8	7386.00	34.4 AV	54.0	-19.6	1.37 V	312	23.2	11.2

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, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	1.34 H	130	70.3	-0.4
2	2390.00	52.4 AV	54.0	-1.6	1.34 H	130	52.8	-0.4
3	*2412.00	111.7 PK			1.34 H	130	112.3	-0.6
4	*2412.00	103.9 AV			1.34 H	130	104.5	-0.6
5	4824.00	54.7 PK	74.0	-19.3	1.59 H	356	50.4	4.3
6	4824.00	41.6 AV	54.0	-12.4	1.59 H	356	37.3	4.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	64.1 PK	74.0	-9.9	1.38 V	137	64.5	-0.4
2	2390.00	46.1 AV	54.0	-7.9	1.38 V	137	46.5	-0.4
3	*2412.00	108.4 PK			1.38 V	137	109.0	-0.6
4	*2412.00	99.8 AV			1.38 V	137	100.4	-0.6
5	4824.00	53.6 PK	74.0	-20.4	1.06 V	349	49.3	4.3
6	4824.00	38.4 AV	54.0	-15.6	1.06 V	349	34.1	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, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	63.9 PK	74.0	-10.1	1.38 H	136	64.3	-0.4
2	2390.00	48.6 AV	54.0	-5.4	1.38 H	136	49.0	-0.4
3	*2437.00	118.7 PK			1.38 H	136	119.2	-0.5
4	*2437.00	109.4 AV			1.38 H	136	109.9	-0.5
5	2483.50	68.1 PK	74.0	-5.9	1.38 H	136	68.8	-0.7
6	2483.50	52.5 AV	54.0	-1.5	1.38 H	136	53.2	-0.7
7	4874.00	58.4 PK	74.0	-15.6	1.39 H	359	54.0	4.4
8	4874.00	48.1 AV	54.0	-5.9	1.39 H	359	43.7	4.4
9	7311.00	46.7 PK	74.0	-27.3	1.31 H	302	35.8	10.9
10	7311.00	35.4 AV	54.0	-18.6	1.31 H	302	24.5	10.9
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	60.7 PK	74.0	-13.3	2.48 V	131	61.1	-0.4
2	2390.00	45.8 AV	54.0	-8.2	2.48 V	131	46.2	-0.4
3	*2437.00	115.1 PK			2.48 V	131	115.6	-0.5
4	*2437.00	106.3 AV			2.48 V	131	106.8	-0.5
5	2483.50	65.4 PK	74.0	-8.6	2.48 V	131	66.1	-0.7
6	2483.50	47.9 AV	54.0	-6.1	2.48 V	131	48.6	-0.7
7	4874.00	58.8 PK	74.0	-15.2	1.23 V	347	54.4	4.4
8	4874.00	48.7 AV	54.0	-5.3	1.23 V	347	44.3	4.4
9	7311.00	46.7 PK	74.0	-27.3	1.38 V	311	35.8	10.9
10	7311.00	34.6 AV	54.0	-19.4	1.38 V	311	23.7	10.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	111.5 PK			1.19 H	129	112.2	-0.7
2	*2462.00	103.7 AV			1.19 H	129	104.4	-0.7
3	2483.50	71.1 PK	74.0	-2.9	1.19 H	129	71.8	-0.7
4	2483.50	52.4 AV	54.0	-1.6	1.19 H	129	53.1	-0.7
5	4924.00	54.3 PK	74.0	-19.7	1.54 H	360	49.8	4.5
6	4924.00	41.3 AV	54.0	-12.7	1.54 H	360	36.8	4.5
7	7386.00	46.4 PK	74.0	-27.6	1.29 H	317	35.2	11.2
8	7386.00	35.3 AV	54.0	-18.7	1.29 H	317	24.1	11.2
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	108.4 PK			1.28 V	136	109.1	-0.7
2	*2462.00	100.1 AV			1.28 V	136	100.8	-0.7
3	2483.50	67.3 PK	74.0	-6.7	1.28 V	136	68.0	-0.7
4	2483.50	49.6 AV	54.0	-4.4	1.28 V	136	50.3	-0.7
5	4924.00	53.2 PK	74.0	-20.8	1.11 V	356	48.7	4.5
6	4924.00	38.2 AV	54.0	-15.8	1.11 V	356	33.7	4.5
7	7386.00	45.7 PK	74.0	-28.3	1.37 V	308	34.5	11.2
8	7386.00	34.0 AV	54.0	-20.0	1.37 V	308	22.8	11.2

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, DET=Peak AV: RB=1 MHz, VB=100 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	71.1 PK	74.0	-2.9	1.19 H	131	71.5	-0.4
2	2390.00	52.4 AV	54.0	-1.6	1.19 H	131	52.8	-0.4
3	*2412.00	111.4 PK			1.19 H	131	112.0	-0.6
4	*2412.00	103.1 AV			1.19 H	131	103.7	-0.6
5	4824.00	55.2 PK	74.0	-18.8	1.64 H	360	50.9	4.3
6	4824.00	42.0 AV	54.0	-12.0	1.64 H	360	37.7	4.3
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	66.2 PK	74.0	-7.8	1.04 V	131	66.6	-0.4
2	2390.00	47.2 AV	54.0	-6.8	1.04 V	131	47.6	-0.4
3	*2412.00	108.6 PK			1.04 V	131	109.2	-0.6
4	*2412.00	99.7 AV			1.04 V	131	100.3	-0.6
5	4824.00	53.1 PK	74.0	-20.9	1.11 V	360	48.8	4.3
6	4824.00	37.9 AV	54.0	-16.1	1.11 V	360	33.6	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	802.11n (HT20)	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=100 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	61.1 PK	74.0	-12.9	1.29 H	136	61.5	-0.4
2	2390.00	48.3 AV	54.0	-5.7	1.29 H	136	48.7	-0.4
3	*2437.00	117.3 PK			1.29 H	136	117.8	-0.5
4	*2437.00	108.7 AV			1.29 H	136	109.2	-0.5
5	2483.50	67.6 PK	74.0	-6.4	1.29 H	136	68.3	-0.7
6	2483.50	52.3 AV	54.0	-1.7	1.29 H	136	53.0	-0.7
7	4874.00	58.2 PK	74.0	-15.8	1.09 H	326	53.8	4.4
8	4874.00	47.7 AV	54.0	-6.3	1.09 H	326	43.3	4.4
9	7311.00	46.7 PK	74.0	-27.3	1.24 H	333	35.8	10.9
10	7311.00	35.6 AV	54.0	-18.4	1.24 H	333	24.7	10.9
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	60.3 PK	74.0	-13.7	1.01 V	128	60.7	-0.4
2	2390.00	45.9 AV	54.0	-8.1	1.01 V	128	46.3	-0.4
3	*2437.00	115.1 PK			1.01 V	128	115.6	-0.5
4	*2437.00	106.1 AV			1.01 V	128	106.6	-0.5
5	2483.50	63.6 PK	74.0	-10.4	1.01 V	128	64.3	-0.7
6	2483.50	48.7 AV	54.0	-5.3	1.01 V	128	49.4	-0.7
7	4874.00	59.2 PK	74.0	-14.8	1.01 V	344	54.8	4.4
8	4874.00	48.8 AV	54.0	-5.2	1.01 V	344	44.4	4.4
9	7311.00	46.3 PK	74.0	-27.7	1.39 V	320	35.4	10.9
10	7311.00	34.1 AV	54.0	-19.9	1.39 V	320	23.2	10.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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, DET=Peak AV: RB=1 MHz, VB=100 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	110.6 PK			1.53 H	124	111.3	-0.7
2	*2462.00	102.1 AV			1.53 H	124	102.8	-0.7
3	2483.50	72.3 PK	74.0	-1.7	1.53 H	124	73.0	-0.7
4	2483.50	52.5 AV	54.0	-1.5	1.53 H	124	53.2	-0.7
5	4924.00	54.6 PK	74.0	-19.4	1.49 H	358	50.1	4.5
6	4924.00	41.6 AV	54.0	-12.4	1.49 H	358	37.1	4.5
7	7386.00	46.1 PK	74.0	-27.9	1.32 H	320	34.9	11.2
8	7386.00	35.1 AV	54.0	-18.9	1.32 H	320	23.9	11.2
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	107.4 PK			1.01 V	113	108.1	-0.7
2	*2462.00	98.6 AV			1.01 V	113	99.3	-0.7
3	2483.50	71.1 PK	74.0	-2.9	1.01 V	113	71.8	-0.7
4	2483.50	49.4 AV	54.0	-4.6	1.01 V	113	50.1	-0.7
5	4924.00	52.6 PK	74.0	-21.4	1.07 V	352	48.1	4.5
6	4924.00	37.8 AV	54.0	-16.2	1.07 V	352	33.3	4.5
7	7386.00	46.1 PK	74.0	-27.9	1.37 V	307	34.9	11.2
8	7386.00	34.4 AV	54.0	-19.6	1.37 V	307	23.2	11.2

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, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	70.3 PK	74.0	-3.7	1.22 H	132	70.7	-0.4
2	2390.00	52.4 AV	54.0	-1.6	1.22 H	132	52.8	-0.4
3	*2422.00	108.5 PK			1.22 H	132	109.1	-0.6
4	*2422.00	99.9 AV			1.22 H	132	100.5	-0.6
5	4844.00	55.1 PK	74.0	-18.9	1.46 H	343	50.7	4.4
6	4844.00	41.8 AV	54.0	-12.2	1.46 H	343	37.4	4.4
7	7266.00	45.7 PK	74.0	-28.3	1.34 H	314	34.6	11.1
8	7266.00	34.9 AV	54.0	-19.1	1.34 H	314	23.8	11.1
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	66.2 PK	74.0	-7.8	2.35 V	130	66.6	-0.4
2	2390.00	49.5 AV	54.0	-4.5	2.35 V	130	49.9	-0.4
3	*2422.00	106.1 PK			2.35 V	130	106.7	-0.6
4	*2422.00	97.1 AV			2.35 V	130	97.7	-0.6
5	4844.00	52.5 PK	74.0	-21.5	1.06 V	360	48.1	4.4
6	4844.00	37.8 AV	54.0	-16.2	1.06 V	360	33.4	4.4
7	7266.00	46.7 PK	74.0	-27.3	1.35 V	307	35.6	11.1
8	7266.00	34.7 AV	54.0	-19.3	1.35 V	307	23.6	11.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	62.3 PK	74.0	-11.7	1.21 H	130	62.7	-0.4
2	2390.00	49.3 AV	54.0	-4.7	1.21 H	130	49.7	-0.4
3	*2437.00	109.4 PK			1.21 H	130	109.9	-0.5
4	*2437.00	101.1 AV			1.21 H	130	101.6	-0.5
5	2483.50	66.7 PK	74.0	-7.3	1.21 H	130	67.4	-0.7
6	2483.50	52.5 AV	54.0	-1.5	1.21 H	130	53.2	-0.7
7	4874.00	54.0 PK	74.0	-20.0	1.60 H	357	49.6	4.4
8	4874.00	40.9 AV	54.0	-13.1	1.60 H	357	36.5	4.4
9	7311.00	46.7 PK	74.0	-27.3	1.24 H	328	35.8	10.9
10	7311.00	35.8 AV	54.0	-18.2	1.24 H	328	24.9	10.9
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	56.8 PK	74.0	-17.2	1.19 V	125	57.2	-0.4
2	2390.00	46.3 AV	54.0	-7.7	1.19 V	125	46.7	-0.4
3	*2437.00	107.1 PK			1.19 V	125	107.6	-0.5
4	*2437.00	98.4 AV			1.19 V	125	98.9	-0.5
5	2483.50	62.7 PK	74.0	-11.3	1.19 V	125	63.4	-0.7
6	2483.50	48.9 AV	54.0	-5.1	1.19 V	125	49.6	-0.7
7	4874.00	53.5 PK	74.0	-20.5	1.08 V	353	49.1	4.4
8	4874.00	38.3 AV	54.0	-15.7	1.08 V	353	33.9	4.4
9	7311.00	46.0 PK	74.0	-28.0	1.32 V	296	35.1	10.9
10	7311.00	34.2 AV	54.0	-19.8	1.32 V	296	23.3	10.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	107.8 PK			2.64 H	141	108.5	-0.7
2	*2452.00	99.1 AV			2.64 H	141	99.8	-0.7
3	2483.50	68.8 PK	74.0	-5.2	2.64 H	141	69.5	-0.7
4	2483.50	52.4 AV	54.0	-1.6	2.64 H	141	53.1	-0.7
5	4904.00	54.6 PK	74.0	-19.4	1.53 H	355	50.2	4.4
6	4904.00	41.6 AV	54.0	-12.4	1.53 H	355	37.2	4.4
7	7356.00	46.4 PK	74.0	-27.6	1.38 H	330	35.4	11.0
8	7356.00	35.3 AV	54.0	-18.7	1.38 H	330	24.3	11.0
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	104.4 PK			1.05 V	113	105.1	-0.7
2	*2452.00	96.2 AV			1.05 V	113	96.9	-0.7
3	2483.50	67.7 PK	74.0	-6.3	1.05 V	113	68.4	-0.7
4	2483.50	51.4 AV	54.0	-2.6	1.05 V	113	52.1	-0.7
5	4904.00	52.9 PK	74.0	-21.1	1.08 V	360	48.5	4.4
6	4904.00	38.1 AV	54.0	-15.9	1.08 V	360	33.7	4.4
7	7356.00	46.5 PK	74.0	-27.5	1.39 V	304	35.5	11.0
8	7356.00	34.6 AV	54.0	-19.4	1.39 V	304	23.6	11.0

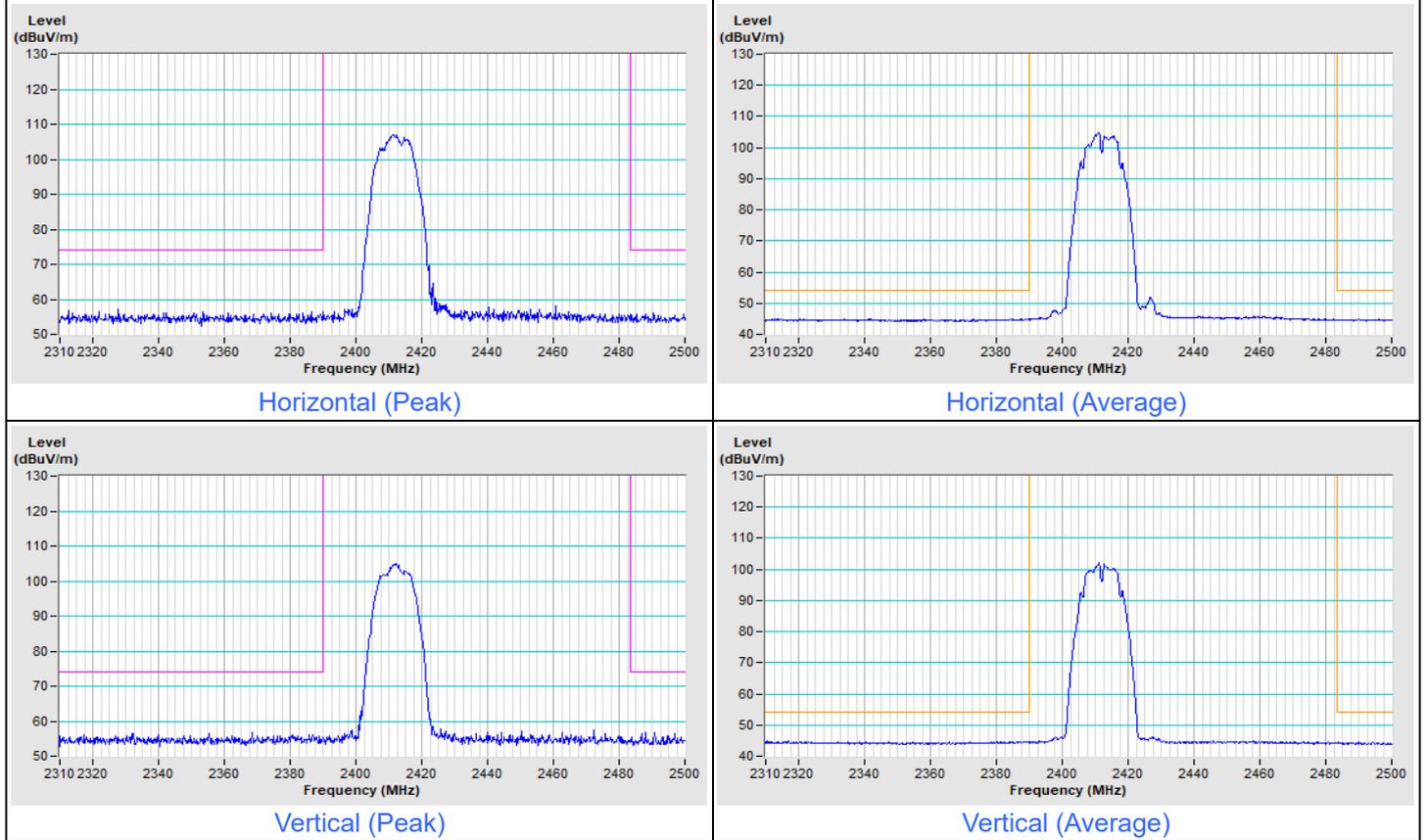
Remarks:

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

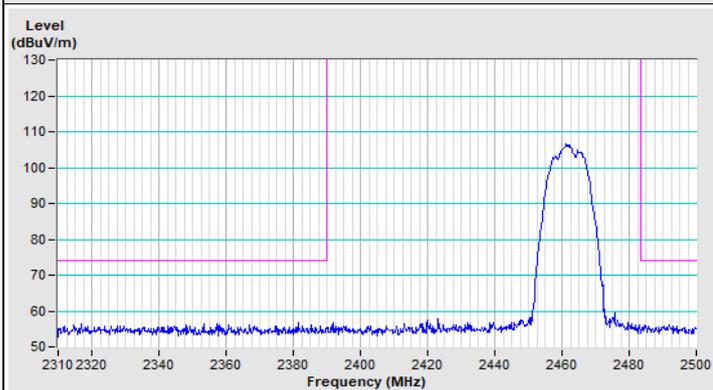
Plot of Band Edge

Frequency Range	2.31 GHz ~ 2.5 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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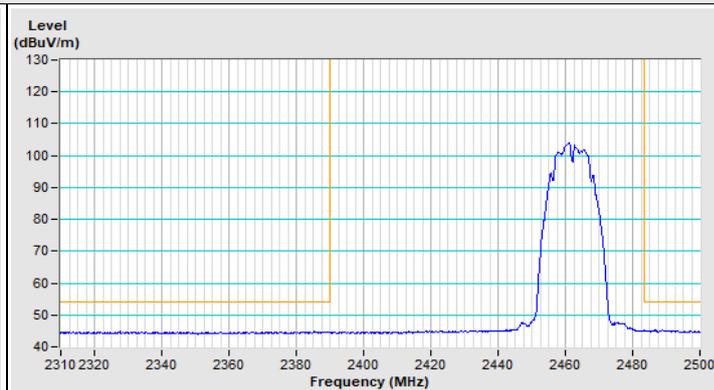
802.11b Channel 1



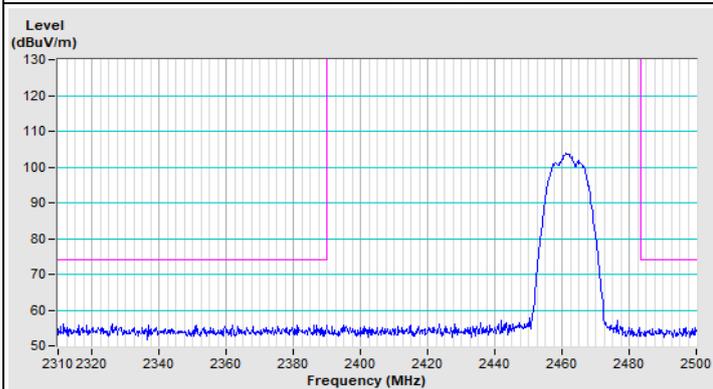
802.11b Channel 11



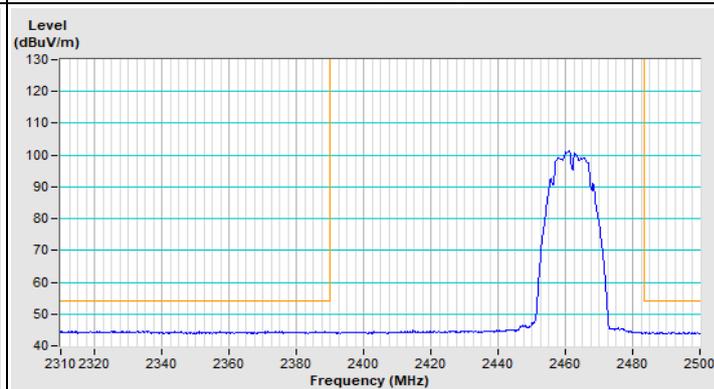
Horizontal (Peak)



Horizontal (Average)



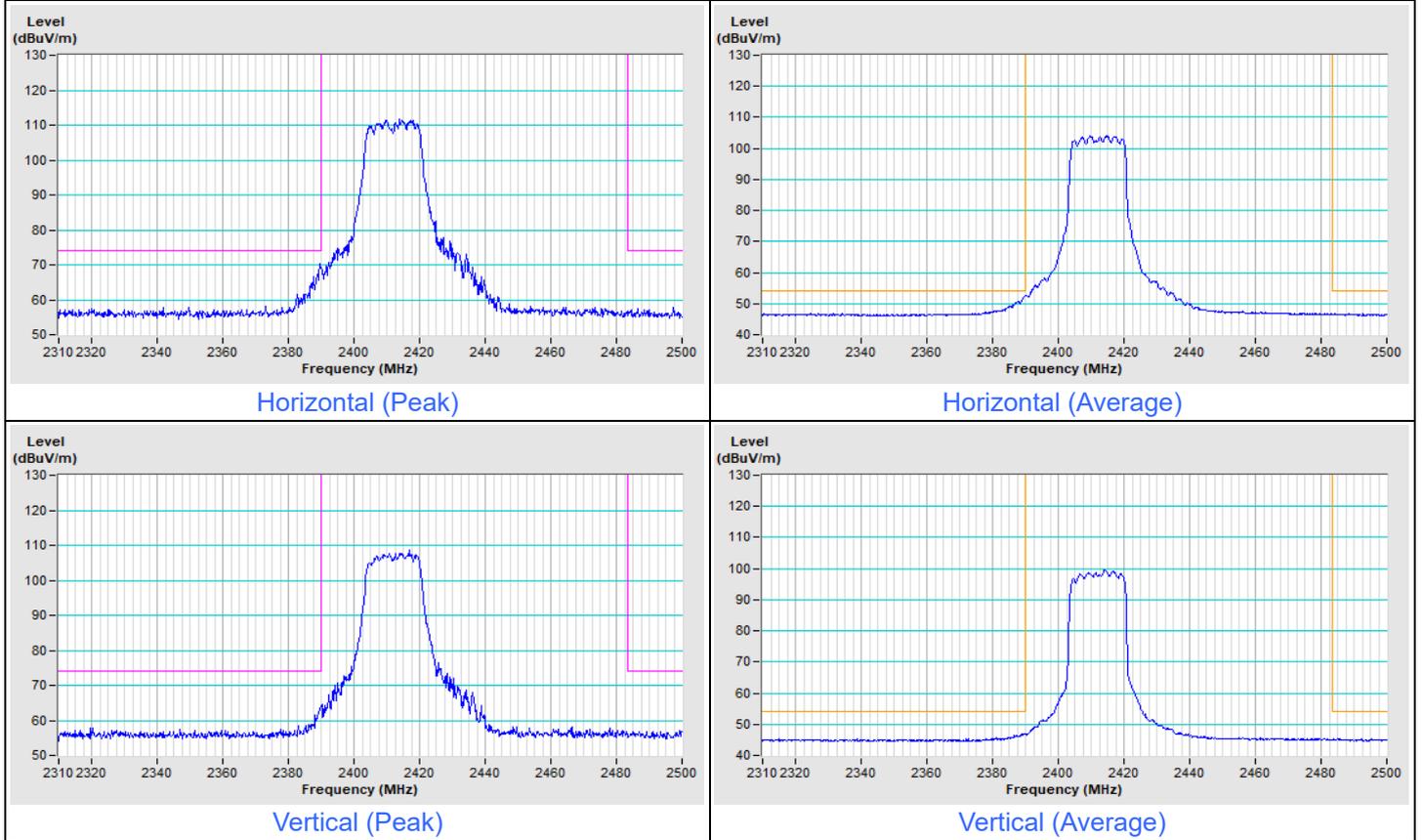
Vertical (Peak)



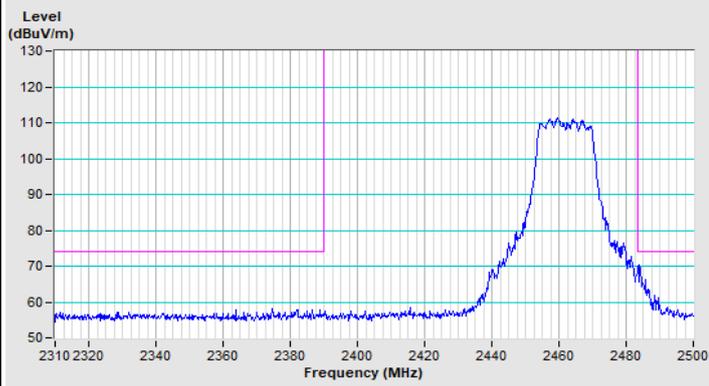
Vertical (Average)

Frequency Range	2.31 GHz ~ 2.5 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
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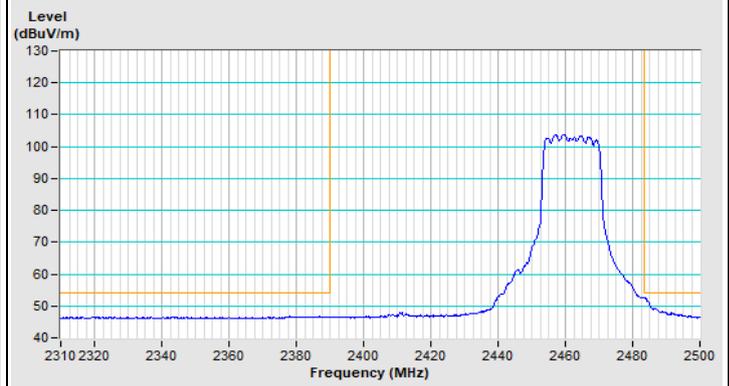
802.11g Channel 1



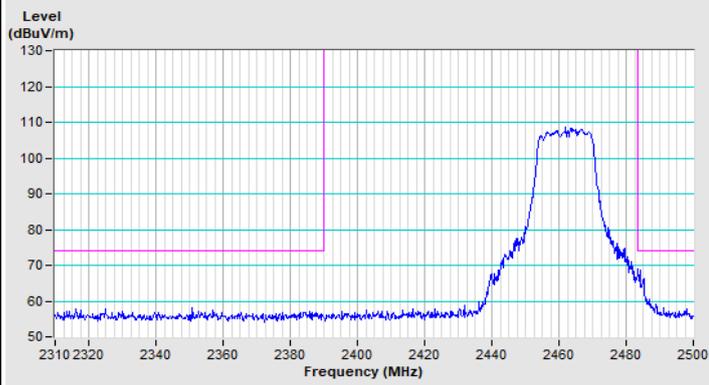
802.11g Channel 11



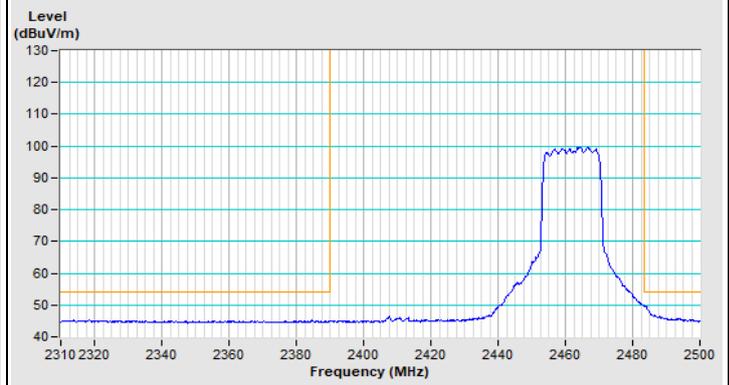
Horizontal (Peak)



Horizontal (Average)



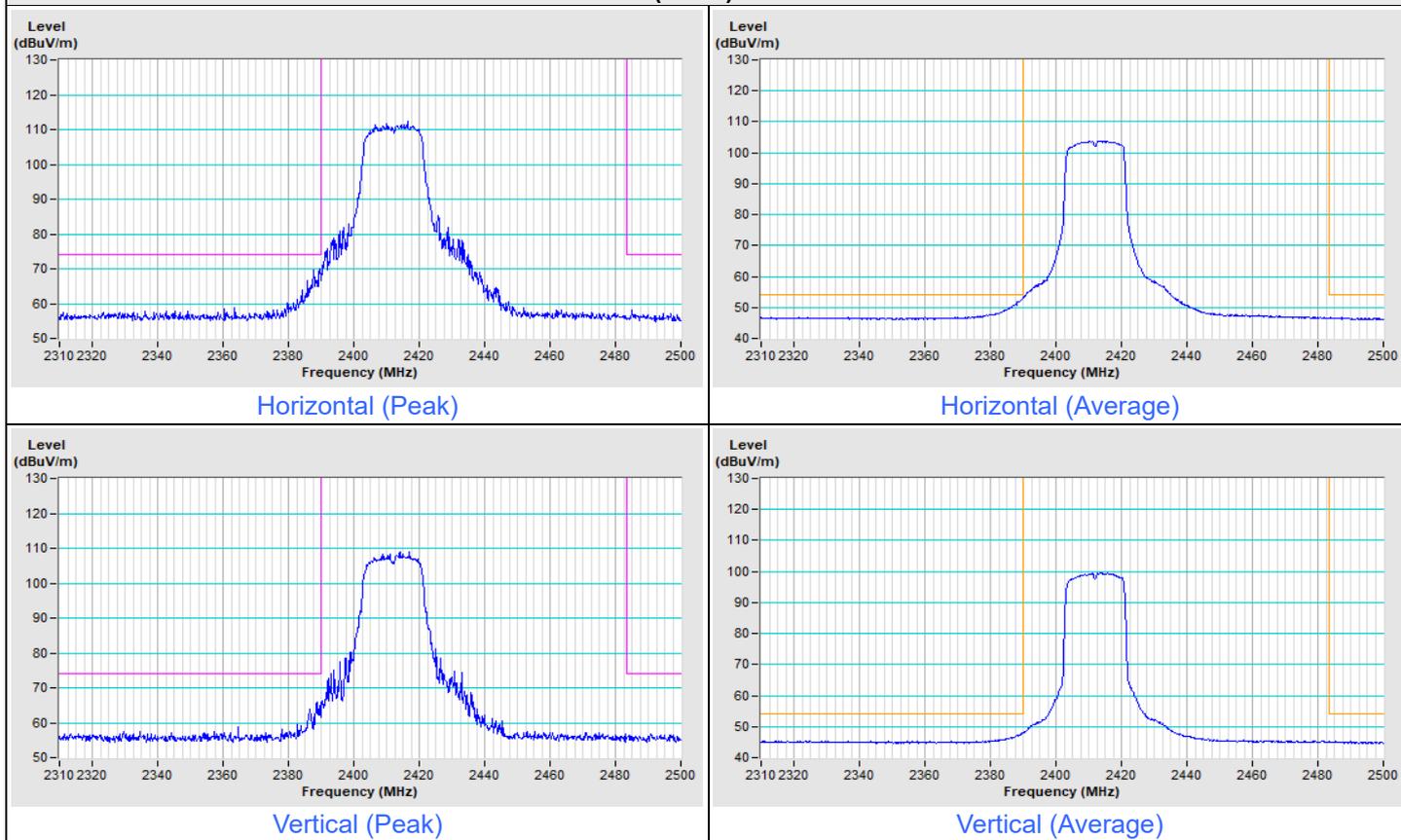
Vertical (Peak)



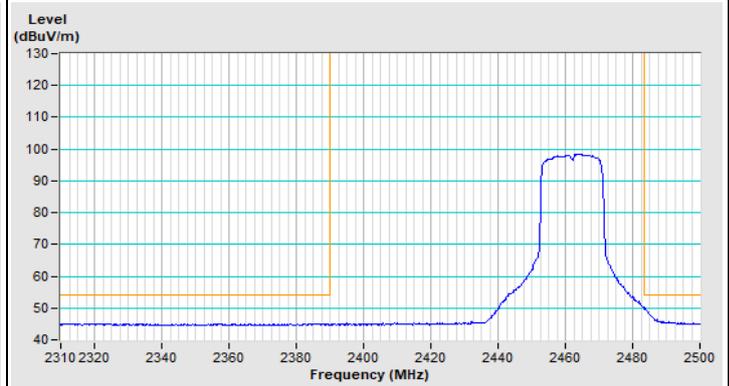
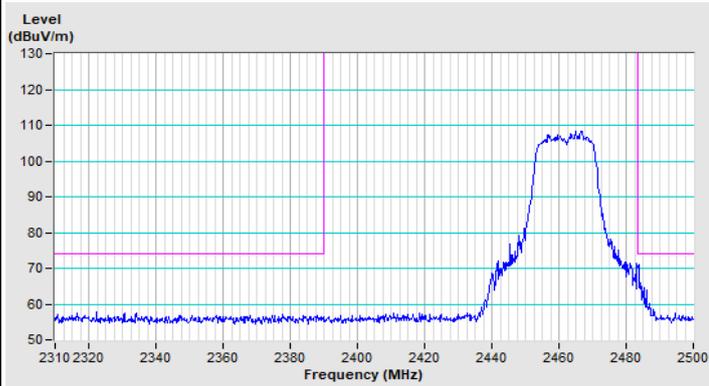
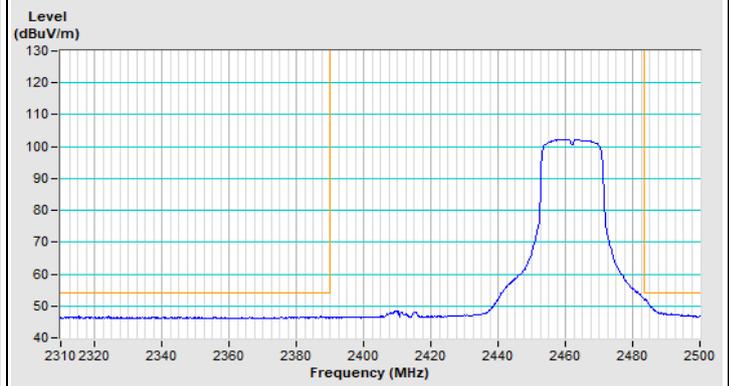
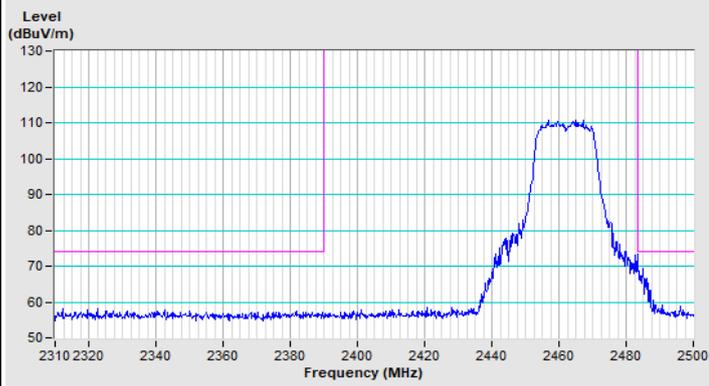
Vertical (Average)

Frequency Range	2.31 GHz ~ 2.5 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=100 Hz, DET=Peak
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802.11n (HT20) Channel 1

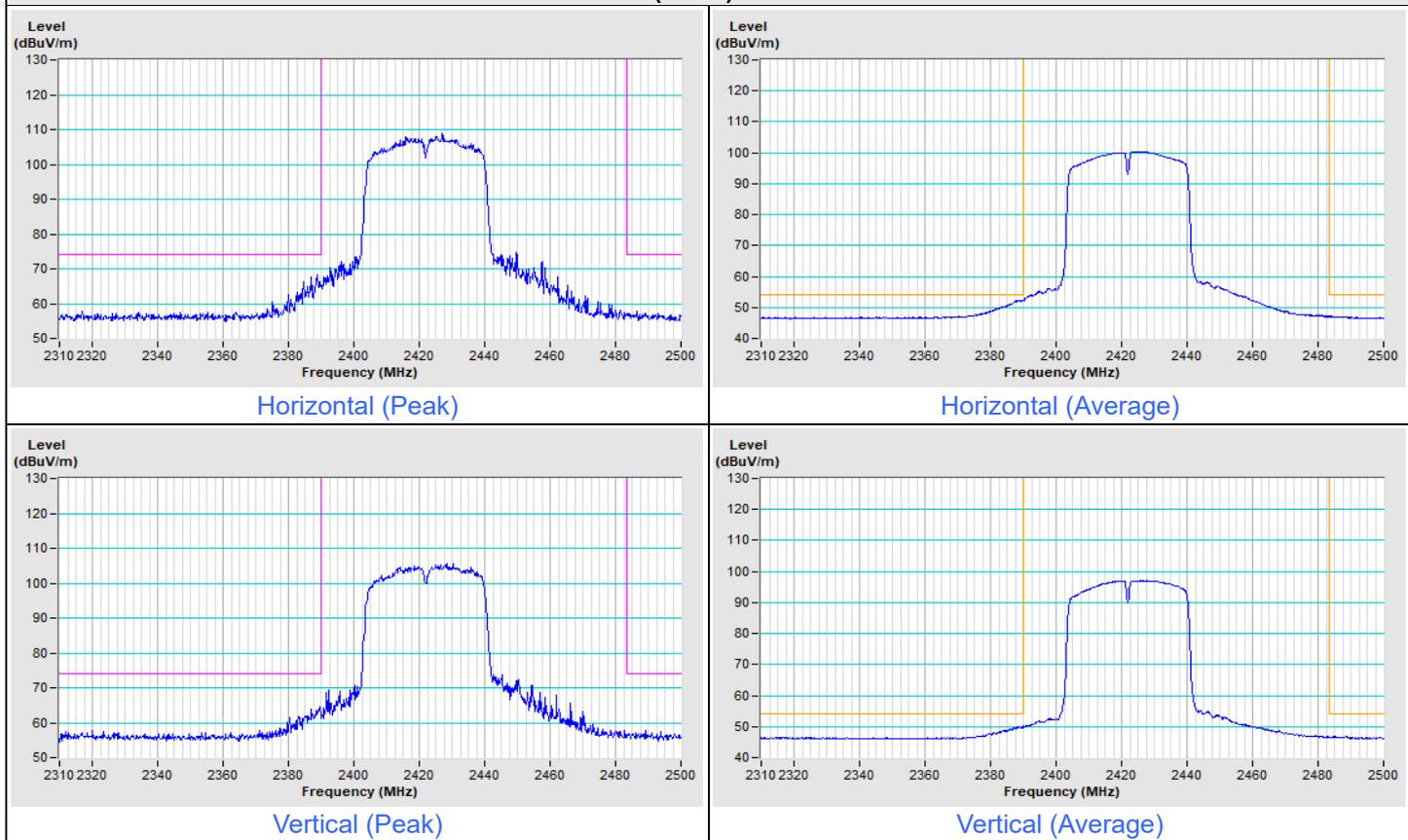


802.11n (HT20) Channel 11

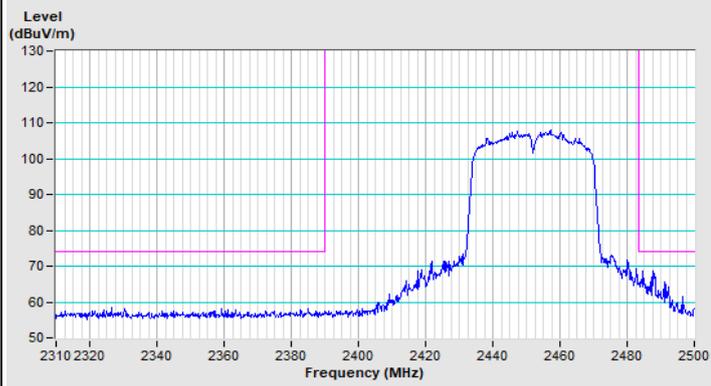


Frequency Range	2.31 GHz ~ 2.5 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
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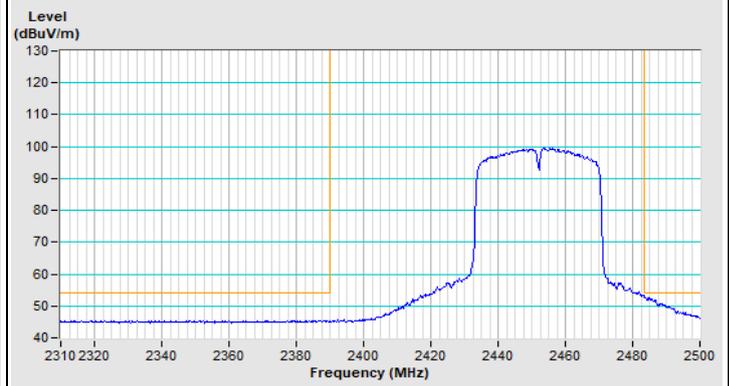
802.11n (HT40) Channel 3



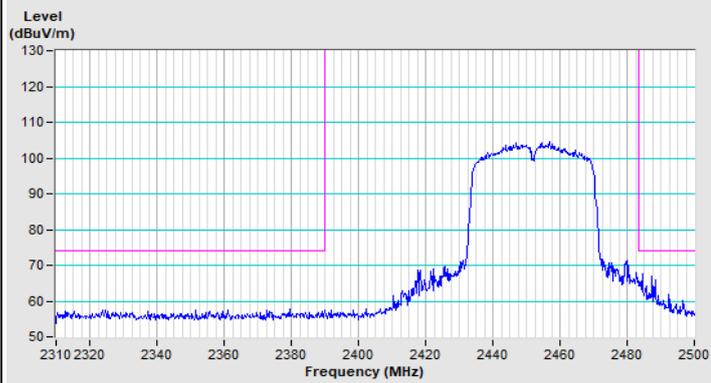
802.11n (HT40) Channel 9



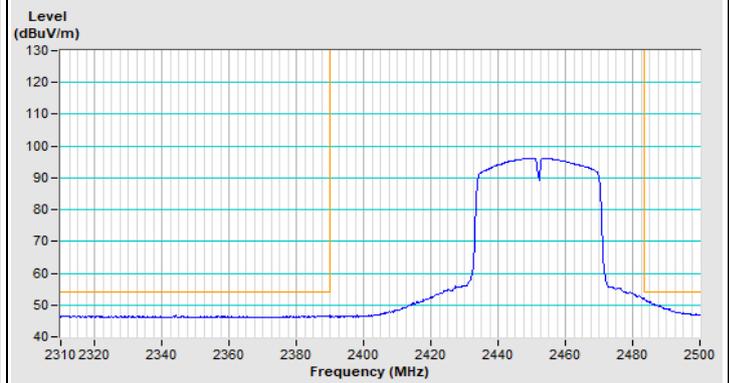
Horizontal (Peak)



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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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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