

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart C (Section 15.247)
Report No.: RFCJWN-WTW-P25060383-1
FCC ID: 2AEUPBHAFL041
Product: Floodlight Cam Pro (2nd Gen)
Brand: ring
Model No.: 5CCEA3
Received Date: 2025/7/9
Test Date: 2025/7/21 ~ 2025/8/27
Issued Date: 2025/9/17

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FCC Registration / 198487 / TW2021 for Test Location(1)
Designation Number: 788550 / TW0003 for Test Location(2)

Approved by: _____

Jeremy Lin

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, Date: _____

2025/9/17

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Prepared by : Polly Chien / Specialist



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Release Control Record

Issue No.	Description	Date Issued
RFCJWN-WTW-P25060383-1	Original release.	2025/9/17

1 Certificate

Product: Floodlight Cam Pro (2nd Gen)

Brand: ring

Test Model: 5CCEA3

Sample Status: Engineering sample

Applicant: Ring LLC

Test Date: 2025/7/21 ~ 2025/8/27

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

Measurement ANSI C63.10-2020

procedure: 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 -15.08 dB at 0.18180 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -3.4 dB at 54.25 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -3.5 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:

Measurement	Specification	Expanded Uncertainty (k=2) (±)
RF Output Power	-	1.371 dB
Power Spectral Density	-	1.017 dB
6 dB Bandwidth	-	206.5 Hz
Conducted Out of Band Emissions	9 kHz ~ 40 GHz	2.79 dB
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.88 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	2.55 dB
	30 MHz ~ 1 GHz	5.77 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 6 GHz	4.71 dB
	6 GHz ~ 18 GHz	5.3 dB
	18 GHz ~ 40 GHz	4.98 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	Floodlight Cam Pro (2nd Gen)
Brand	ring
Test Model	5CCEA3
Status of EUT	Engineering sample
Power Supply Rating	100-240Vac, 50/60Hz, 0.45A, 45W (From Floodlight Cam Wired Pro)
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in VHT mode 1024QAM for OFDMA in 11ax mode
Modulation Technology	DSSS, OFDM, OFDMA
Transfer Rate	Up to 143.4 Mbps
Operating Frequency	2.412 GHz ~ 2.462 GHz
Number of Channel	802.11b, 802.11g, 802.11n (HT20), VHT20, 802.11ax (HE20):11
Output Power	79.25 mW (18.99 dBm)

Note:

1. The EUT support OFDMA and Partial RU mode, therefore partial RU combination were investigated and the worst case scenario was identified.
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.

Item	Brand	Model	Antenna Net Gain(dBi)	Frequency range	Antenna Type	Connector Type
BT	INPAQ	WAG-M-LA-00-098	2.93	2.4~2.4835GHz	PIFA	N/A
Wi-Fi		WAG-M-LB-00-052	2.8	2.4~2.4835GHz		
			1.86	5.15~5.25GHz		
			2.5	5.25~5.35GHz		
			2.5	5.47~5.725GHz		
			1.92	5.725~5.85GHz		

*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
VHT20	1TX	1RX
802.11ax (HE20)	1TX	1RX
802.11ax (RU26/52/106/242)	1TX	1RX

Note: The modulation and bandwidth are similar for 802.11n mode for 20 MHz, VHT mode for 20 MHz and 802.11ax mode for 20 MHz. Therefore, the investigated worst case is the representative mode in test report.

3.3 Channel List

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

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

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. EUT can be used in the following ways: X-axis/ Y-axis/ Z-axis. Pre-scan these ways and find the worst case as a representative test condition. 2. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
Worst Case:	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	EUT Configure Mode	Mode	Tested Channel	Modulation	Data Rate Parameter
RF Output Power	A	802.11b	1, 6, 11	DBPSK	1Mb/s
		802.11g	1, 6, 11	BPSK	6Mb/s
		VHT20	1, 6, 11	BPSK	MCS0
		802.11ax (HE20)	1, 6, 11	BPSK	MCS0
		802.11ax (HE20) 26-tone RU	1, 6, 11	BPSK	MCS0
		802.11ax (HE20) 52-tone RU	1, 6, 11	BPSK	MCS0
		802.11ax (HE20) 106-tone RU	1, 6, 11	BPSK	MCS0
Power Spectral Density	A	802.11b	1, 6, 11	DBPSK	1Mb/s
		802.11g	1, 6, 11	BPSK	6Mb/s
		VHT20	1, 6, 11	BPSK	MCS0
		802.11ax (HE20)	1, 6, 11	BPSK	MCS0
		802.11ax (HE20) 26-tone RU	1, 6, 11	BPSK	MCS0
		802.11ax (HE20) 52-tone RU	1, 6, 11	BPSK	MCS0
		802.11ax (HE20) 106-tone RU	1, 6, 11	BPSK	MCS0
6 dB Bandwidth / Conducted Out of Band Emissions	A	802.11b	1, 6, 11	DBPSK	1Mb/s
		802.11g	1, 6, 11	BPSK	6Mb/s
		VHT20	1, 6, 11	BPSK	MCS0
		802.11ax (HE20)	1, 6, 11	BPSK	MCS0
AC Power Conducted Emissions	B	802.11b	11	DBPSK	1Mb/s
Unwanted Emissions below 1 GHz	B	802.11b	11	DBPSK	1Mb/s
Unwanted Emissions above 1 GHz	B	802.11b	1, 6, 11	DBPSK	1Mb/s
		802.11g	1, 6, 11	BPSK	6Mb/s
		VHT20	1, 6, 11	BPSK	MCS0
		802.11ax (HE20)	1, 6, 11	BPSK	MCS0
EUT Configure Mode:	A	Conducted			
	B	Radiated			

3.5 Duty Cycle of Test Signal

802.11b: Duty cycle = 8.025 ms / 8.25 ms x 100% = 97.3%, duty factor = 10 * log (1/Duty cycle) = 0.12 dB

802.11g: Duty cycle = 1.372 ms / 1.772 ms x 100% = 77.4%, duty factor = 10 * log (1/Duty cycle) = 1.11 dB

VHT20: Duty cycle = 1.28 ms / 1.495 ms x 100% = 85.6%, duty factor = 10 * log (1/Duty cycle) = 0.67 dB

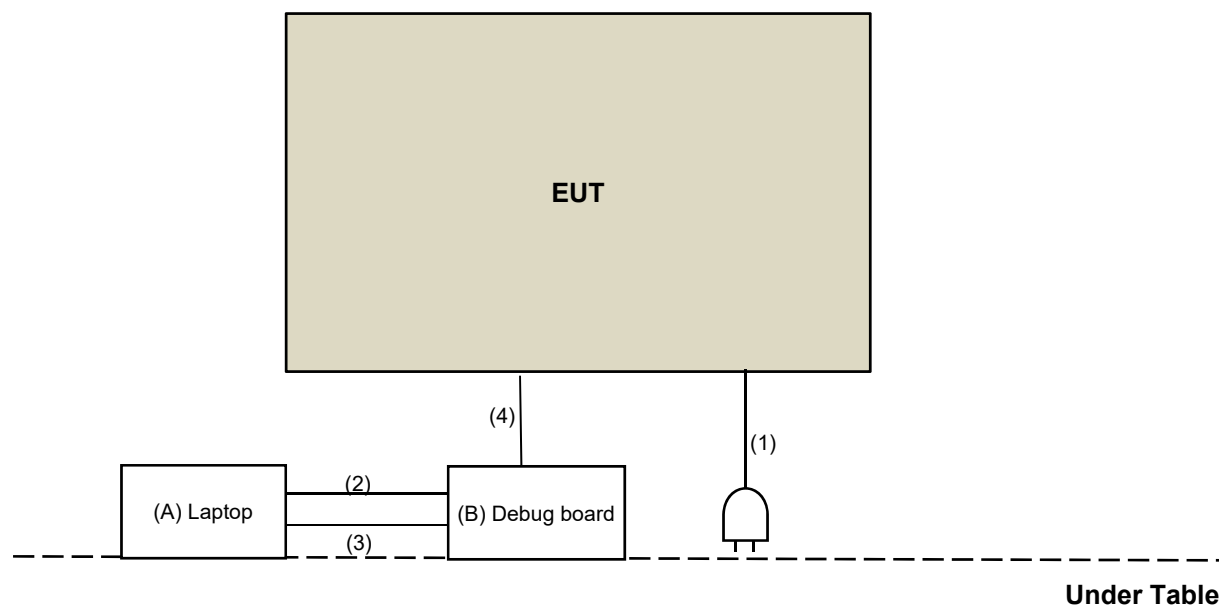
802.11ax (HE20): Duty cycle = 1 ms / 1.22 ms x 100% = 82.0%, duty factor = 10 * log (1/Duty cycle) = 0.86 dB



3.6 Test Program Used and Operation Descriptions

Controlling software Compliance 1.0.1.54 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	Laptop	Lenovo	20J4 MD A003TW	PF-11H9AK	N/A	Provided by Lab
B	Debug board	FII&Ring	95.3676T00	N/A	N/A	Supplied by applicant

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	AC Power Cable	1	1	No	0	Supplied by applicant
2	Micro USB	1	1	No	0	Provided by Lab
3	Micro USB	1	2	No	0	Provided by Lab
4	FPC	1	0.4	No	0	Supplied by applicant

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-10	00800A1K01A-10-01	2025/5/23	2026/5/22
USB Power Sensor Anritsu	MA24408A	12994	2024/12/4	2025/12/3

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2025/8/27

4.2 Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2025/5/23	2026/5/22
Signal & Spectrum Analyzer R&S	FSV3044	101504	2025/6/18	2026/6/17
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2025/8/27

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	E1-011279	04	2024/11/28	2025/11/27
	E1-011280	05	2024/11/28	2025/11/27
	E1-011311	09	2024/11/28	2025/11/27
DC LISN Schwarzbeck	NNBM 8126G	8126G-069	2024/11/5	2025/11/4
EMI Test Receiver R&S	ESCI	100613	2024/11/25	2025/11/24
Fixed Attenuator Mini-Circuits	HAT-10+	PAD-COND1-01	2025/1/5	2026/1/4
LISN R&S	ENV216	101826	2025/3/24	2026/3/23
	ESH3-Z5	100311	2024/9/5	2025/9/4
RF Coaxial Cable Woken	5D-FB	Cable-cond1-01	2025/1/5	2026/1/4
Software BVADT	BVADT_Cond_ V7.4.1.0	N/A	N/A	N/A
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2024/8/28	2025/8/27

Notes:

1. The test was performed in HY - Conduction 1.
2. Tested Date: 2025/8/7 ~ 2025/8/8

4.6 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Bi_Log Antenna Schwarzbeck	VULB 9168	137	2024/10/9	2025/10/8
Coupling / Decoupling Network Schwarzbeck	CDNE-M2	00097	2025/5/28	2026/5/27
	CDNE-M3	00091	2025/3/20	2026/3/19
Loop Antenna TESEQ	HLA 6121	64095	2024/10/17	2025/10/16
MXE EMI Receiver Agilent	N9038A	MY50010158	2024/10/11	2025/10/10
Preamplifier Agilent	8447D	2944A11064	2025/2/14	2026/2/13
RF Coaxial Cable Pacific	8D-FB	Cable-CH6-02	2025/6/24	2026/6/23
Signal Analyzer R&S	FSV40	101544	2025/7/1	2026/6/30
Software BVADT	Radiated_V7.7.1.1.1	N/A	N/A	N/A
	Radiated_V8.7.08	N/A	N/A	N/A
Tower ADT	AT100	0306	N/A	N/A
Turn Table ADT	TT100	0306	N/A	N/A

Notes:

1. The test was performed in Linkou 966 Chamber 6 (CH 6).
2. Tested Date: 2025/7/29

4.7 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Boresight antenna tower fixture BV	BAF-02	6	N/A	N/A
High Pass Filter Wainwright	WHK 3.1/18G-10SS	SN 8	2025/5/22	2026/5/21
Horn Antenna EMCO	3115	00028257	2024/11/10	2025/11/9
Horn Antenna ETS-Lindgren	3117-PA	00215857	2024/11/10	2025/11/9
Horn Antenna Schwarzbeck	BBHA 9170	212	2024/10/18	2025/10/17
		BBHA9170190	2024/11/10	2025/11/9
MXE EMI Receiver Agilent	N9038A	MY50010158	2024/10/11	2025/10/10
Notch Filter Micro-Tronics	BRC50703-01	010	2025/5/22	2026/5/21
	BRM17690	005	2025/5/22	2026/5/21
Preamplifier EMCI	EMC0126545	980076	2025/2/14	2026/2/13
	EMC184045B	980175	2024/8/25	2025/8/24
		980235	2025/2/14	2026/2/13
Preamplifier HP	8449B	3008A01201	2025/2/14	2026/2/13
RF Coaxial Cable EMCI	EMC104	190801	2025/7/4	2026/7/3
		190804	2025/7/4	2026/7/3
RF Coaxial Cable EMEC	EM102-KMKM-100	02	2025/7/4	2026/7/3
RF Coaxial Cable HUBER+SUHNER	SF-104	Cable-CH6-01	2025/7/4	2026/7/3
Signal Analyzer R&S	FSV40	101042	2024/9/12	2025/9/11
		101544	2025/7/1	2026/6/30
Software BVADT	Radiated_V7.7.1.1.1	N/A	N/A	N/A
	Radiated_V8.7.08	N/A	N/A	N/A
Tower ADT	AT100	0306	N/A	N/A
Turn Table ADT	TT100	0306	N/A	N/A

Notes:

1. The test was performed in Linkou 966 Chamber 6 (CH 6).
2. Tested Date: 2025/7/21 ~ 2025/7/25

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 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

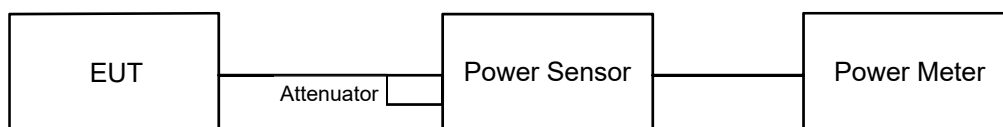
Notes:

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



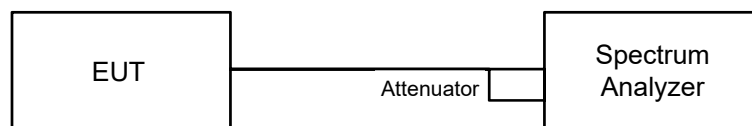
6.1.2 Test Procedure

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



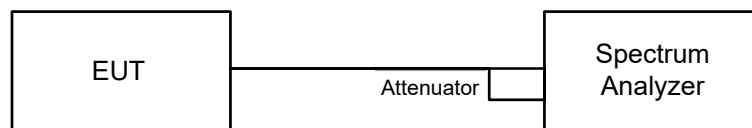
6.2.2 Test Procedure

The following procedure is applicable when the EUT cannot be configured to transmit continuously (i.e., $D < 98\%$), when sweep triggering/signal gating cannot be used to measure only when the EUT is transmitting at its maximum power control level, and when the transmission duty cycle is constant (i.e., duty cycle variations are less than $\pm 2\%$):

- Measure the duty cycle (D) of the transmitter output signal.
- Set instrument center frequency to DTS channel center frequency.
- cSet span to > 1.5 times the OBW.
- Set RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- Set VBW $\geq [3 \times \text{RBW}]$.
- Detector = power averaging (rms) or sample detector (when rms not available).
- Ensure that the number of measurement points in the sweep $\geq [2 \times \text{span} / \text{RBW}]$.
- Sweep time = auto couple.
- Do not use sweep triggering; allow sweep to "free run."
- Employ trace averaging (rms) mode over a minimum of 100 traces.
- Use the peak marker function to determine the maximum amplitude level.
- Add $[10 \log (1 / D)]$, where D is the duty cycle measured in step a), to the measured PSD to compute the average PSD during the actual transmission time.
- If measured value exceeds requirement specified by regulatory agency, then reduce RBW (but no less than 3 kHz) and repeat (note that this might require zooming in on the emission of interest and reducing the span to meet the minimum measurement point requirement as the RBW is reduced).

6.3 6 dB Bandwidth

6.3.1 Test Setup

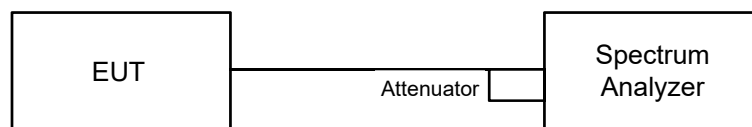


6.3.2 Test Procedure

- Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz.
- Set the VBW $\geq [3 \times \text{RBW}]$.
- Detector = peak.
- Trace mode = max-hold.
- Sweep = No faster than coupled (auto) time.
- Allow the trace to stabilize.
- Measure the maximum width of the emission by placing two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “-6 dB down amplitude”. If a marker is below this “-6 dB down amplitude” value, then it shall be as close as possible to this value.

6.4 Conducted Out of Band Emissions

6.4.1 Test Setup



6.4.2 Test Procedure

MEASUREMENT PROCEDURE REF

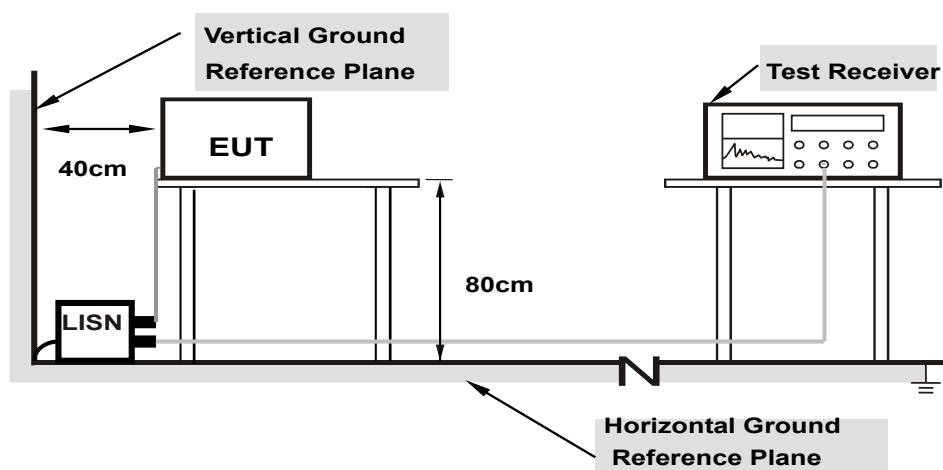
- Set instrument center frequency to DTS channel center frequency.
- Set the span to ≥ 1.5 times the DTS bandwidth.
- Set the RBW = 100 kHz.
- Set the VBW $\geq [3 \times \text{RBW}]$.
- Detector = peak.
- fSweep time = No faster than coupled (auto) time.
- Trace mode = max-hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum PSD level.
- Note that the channel found to contain the maximum PSD level can be used to establish the reference level

MEASUREMENT PROCEDURE OOB

- Set the center frequency and span to encompass frequency range to be measured. Note that the frequency range might need to be divided into multiple frequency ranges to retain frequency resolution.
NOTE—the number of points can also be increased for large spans to retain frequency resolution
- Set the RBW = 100 kHz.
- Set the VBW $\geq [3 \times \text{RBW}]$.
- Detector = peak.
- Sweep time = No faster than coupled (auto) time.
- Trace mode = max-hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum amplitude level. Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.

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

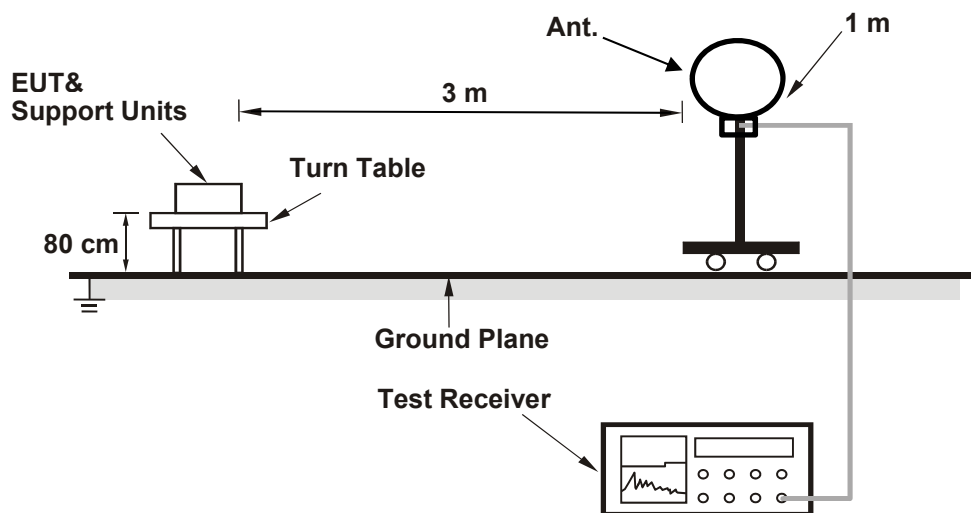
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The 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.

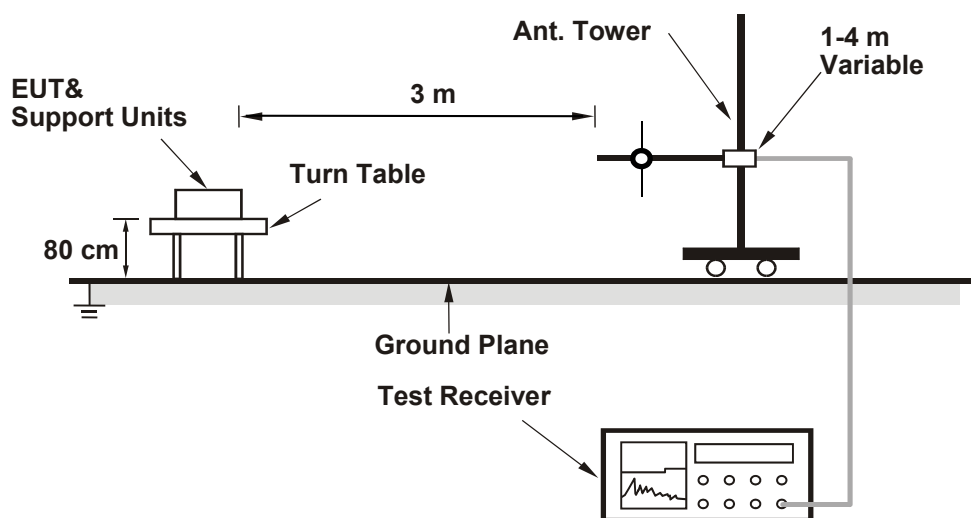
6.6 Unwanted Emissions below 1 GHz

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

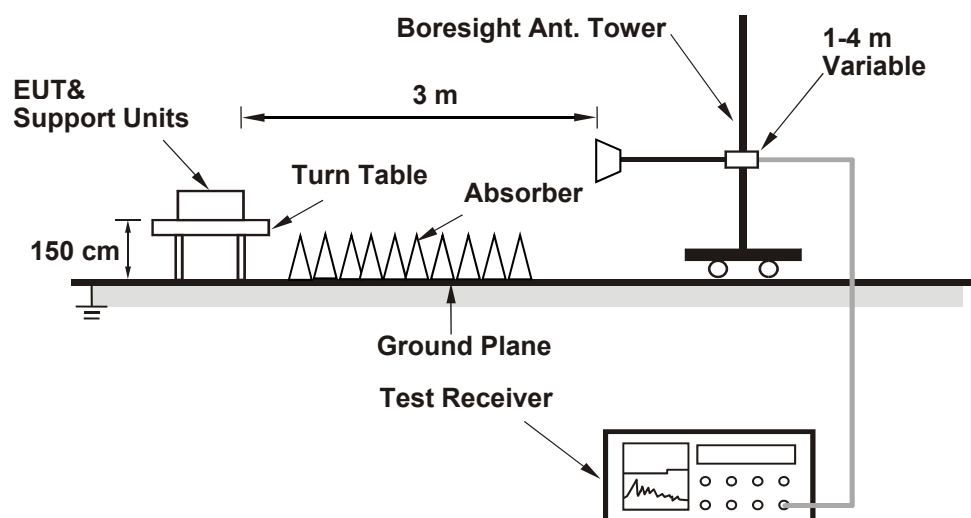
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the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

- General 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, unless otherwise specified the following procedure (restricted-bands adjacent to the allocated band).
- 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:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Jisyong Wang
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802.11b

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
1	2412	76.208	18.82	30	Pass
6	2437	77.983	18.92	30	Pass
11	2462	79.25	18.99	30	Pass

Note: The antenna gain is 2.8 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
1	2412	76.913	18.86	30	Pass
6	2437	77.625	18.90	30	Pass
11	2462	61.802	17.91	30	Pass

Note: The antenna gain is 2.8 dBi < 6 dBi, so the output power limit shall not be reduced.

VHT20

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
1	2412	71.285	18.53	30	Pass
6	2437	72.111	18.58	30	Pass
11	2462	35.563	15.51	30	Pass

Note: The antenna gain is 2.8 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
1	2412	72.111	18.58	30	Pass
6	2437	72.946	18.63	30	Pass
11	2462	35.727	15.53	30	Pass

Note: The antenna gain is 2.8 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) 26-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
1	2412	6.683	8.25	30	Pass
6	2437	6.966	8.43	30	Pass
11	2462	4.315	6.35	30	Pass

Note: The antenna gain is 2.8 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) 52-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
1	2412	13.428	11.28	30	Pass
6	2437	13.677	11.36	30	Pass
11	2462	8.67	9.38	30	Pass

Note: The antenna gain is 2.8 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) 106-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
1	2412	17.498	12.43	30	Pass
6	2437	17.701	12.48	30	Pass
11	2462	10.839	10.35	30	Pass

Note: The antenna gain is 2.8 dBi < 6 dBi, so the output power limit shall not be reduced.

7.2 Power Spectral Density

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Jisyoung Wang
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802.11b

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)	Duty Factor (dB)	PSD (dBm/3kHz)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-11.88	0.12	-11.88	-11.76	8	Pass
6	2437	-11.87	0.12	-11.87	-11.75	8	Pass
11	2462	-11.55	0.12	-11.55	-11.43	8	Pass

Note: The antenna gain is 2.8 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)	PSD (dBm/3kHz)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-15.77	1.11	-15.77	-14.66	8	Pass
6	2437	-15.49	1.11	-15.49	-14.38	8	Pass
11	2462	-16.22	1.11	-16.22	-15.11	8	Pass

Note: The antenna gain is 2.8 dBi < 6 dBi, so the power density limit shall not be reduced.

VHT20

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)	Duty Factor (dB)	PSD (dBm/3kHz)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-15.36	0.67	-15.36	-14.69	8	Pass
6	2437	-15.35	0.67	-15.35	-14.68	8	Pass
11	2462	-17.96	0.67	-17.96	-17.29	8	Pass

Note: The antenna gain is 2.8 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)	Duty Factor (dB)	PSD (dBm/3kHz)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-17.11	0.86	-17.11	-16.25	8	Pass
6	2437	-16.78	0.86	-16.78	-15.92	8	Pass
11	2462	-18.61	0.86	-18.61	-17.75	8	Pass

Note: The antenna gain is 2.8 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 26-tone RU

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)	Duty Factor (dB)	PSD (dBm/3kHz)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-17.54	0.86	-17.54	-16.68	8	Pass
6	2437	-16.83	0.86	-16.83	-15.97	8	Pass
11	2462	-18.79	0.86	-18.79	-17.93	8	Pass

Note: The antenna gain is 2.8 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 52-tone RU

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)	Duty Factor (dB)	PSD (dBm/3kHz)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-17.75	0.86	-17.75	-16.89	8	Pass
6	2437	-16.8	0.86	-16.80	-15.94	8	Pass
11	2462	-18.73	0.86	-18.73	-17.87	8	Pass

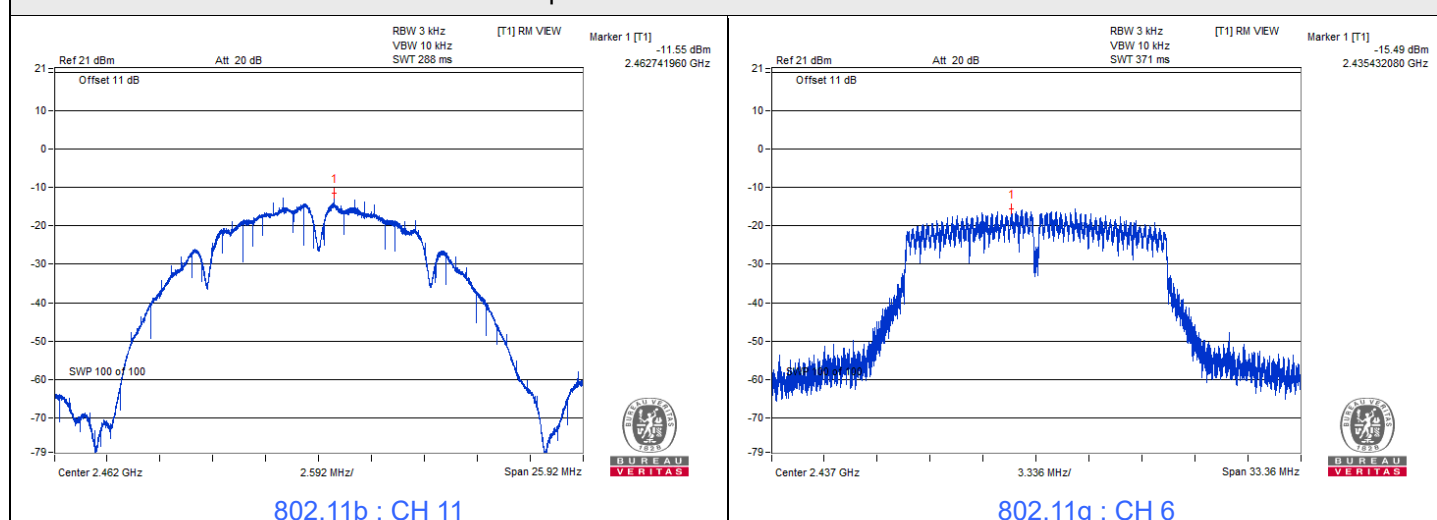
Note: The antenna gain is 2.8 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 106-tone RU

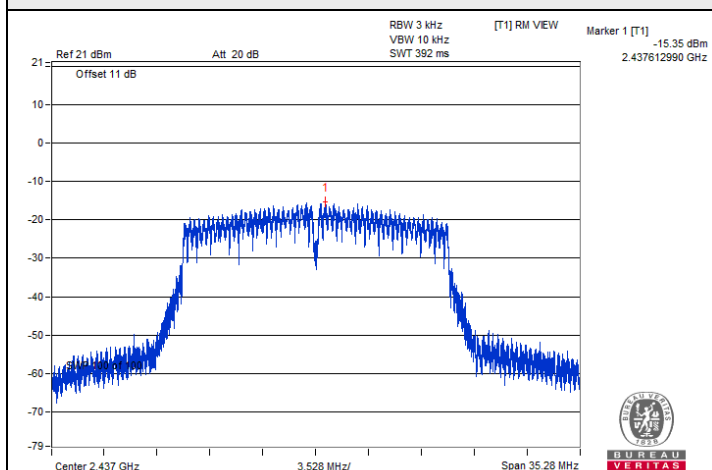
Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)	Duty Factor (dB)	PSD (dBm/3kHz)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-17.34	0.86	-17.34	-16.48	8	Pass
6	2437	-16.81	0.86	-16.81	-15.95	8	Pass
11	2462	-18.83	0.86	-18.83	-17.97	8	Pass

Note: The antenna gain is 2.8 dBi < 6 dBi, so the power density limit shall not be reduced.

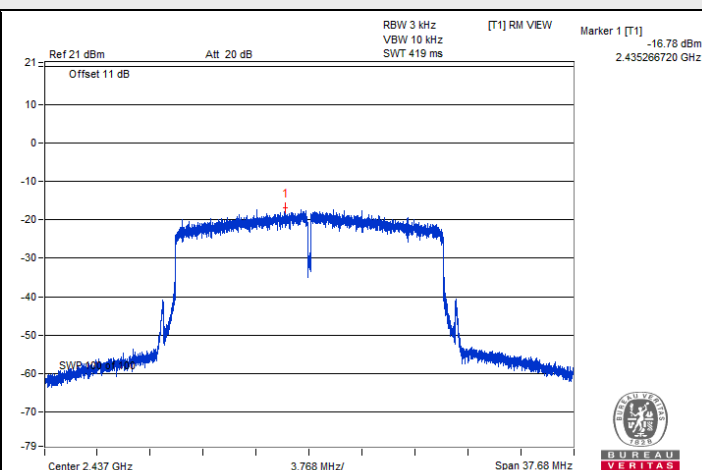
Spectrum Plot of Maximum Value



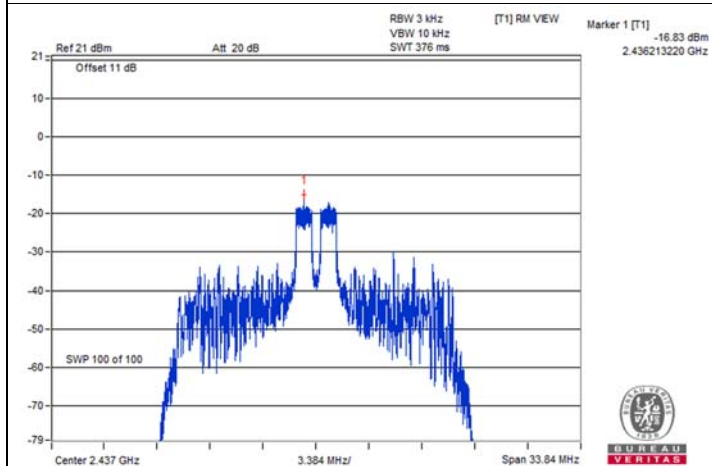
Spectrum Plot of Maximum Value



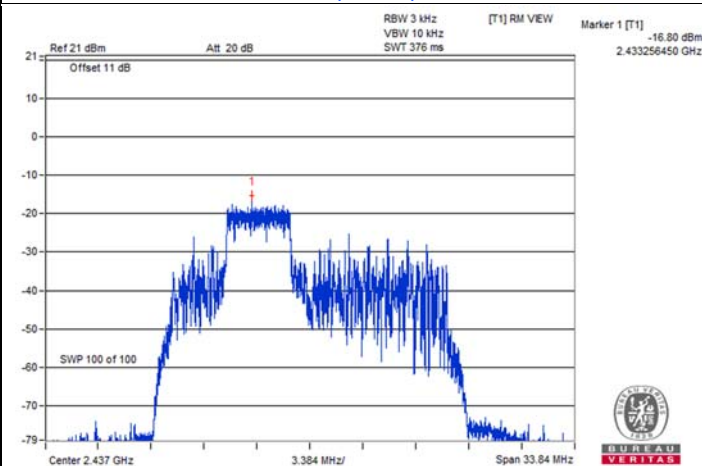
VHT20 : CH 6



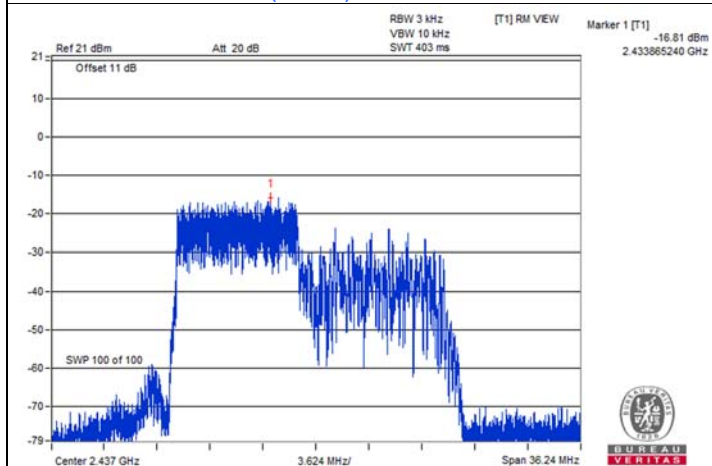
802.11ax (HE20) : CH 6



802.11ax (HE20) 26-tone RU : CH 6



802.11ax (HE20) 52-tone RU : CH 6



802.11ax (HE20) 106-tone RU : CH 6

7.3 6 dB Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Jisyoung Wang
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802.11b

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	8.29	0.5	Pass
6	2437	8.29	0.5	Pass
11	2462	8.28	0.5	Pass

802.11g

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	16.24	0.5	Pass
6	2437	16.24	0.5	Pass
11	2462	16.04	0.5	Pass

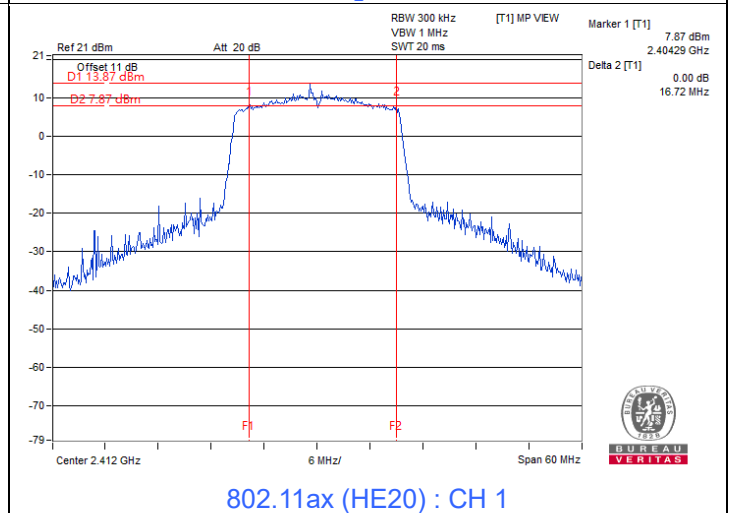
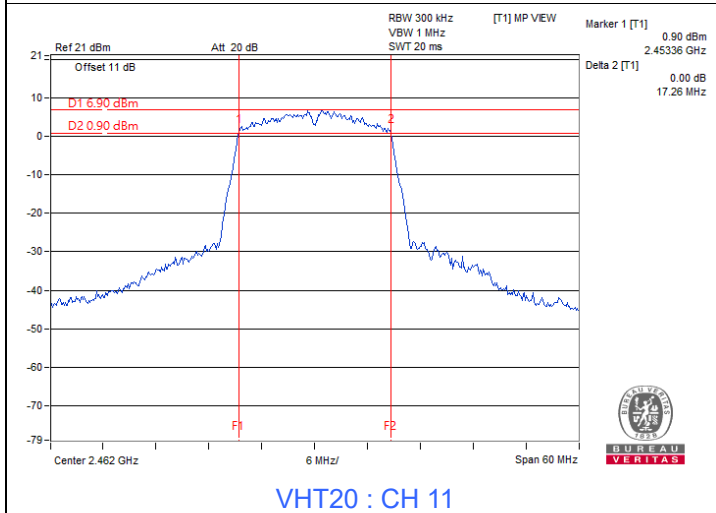
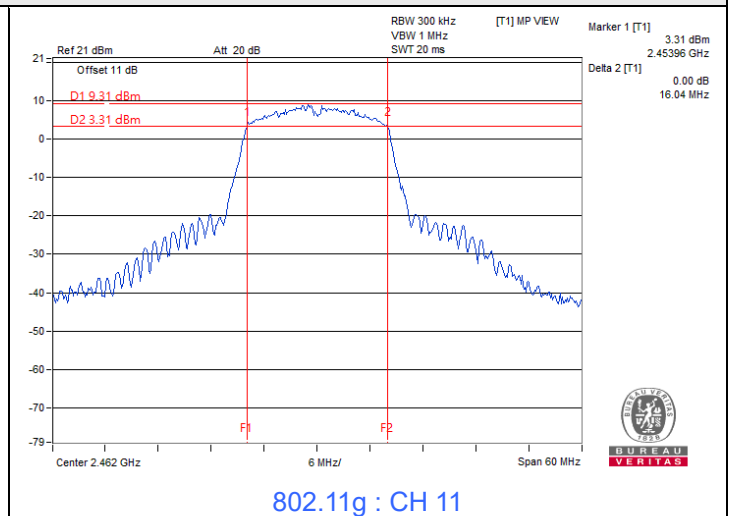
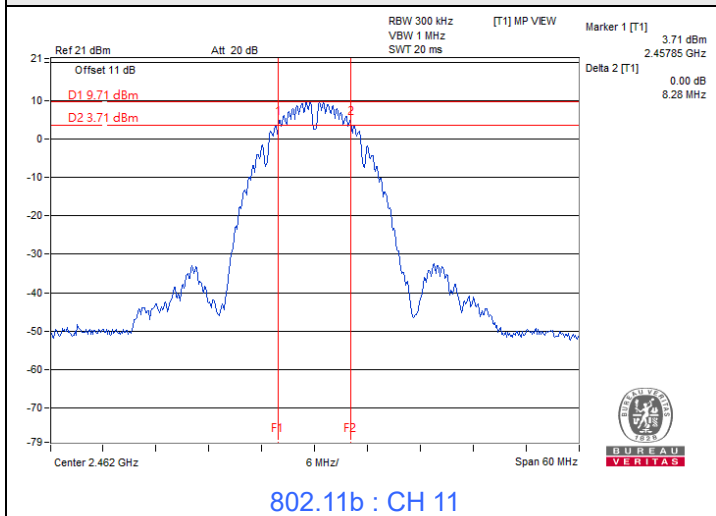
VHT20

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	17.33	0.5	Pass
6	2437	17.4	0.5	Pass
11	2462	17.26	0.5	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	16.72	0.5	Pass
6	2437	17.6	0.5	Pass
11	2462	18.8	0.5	Pass

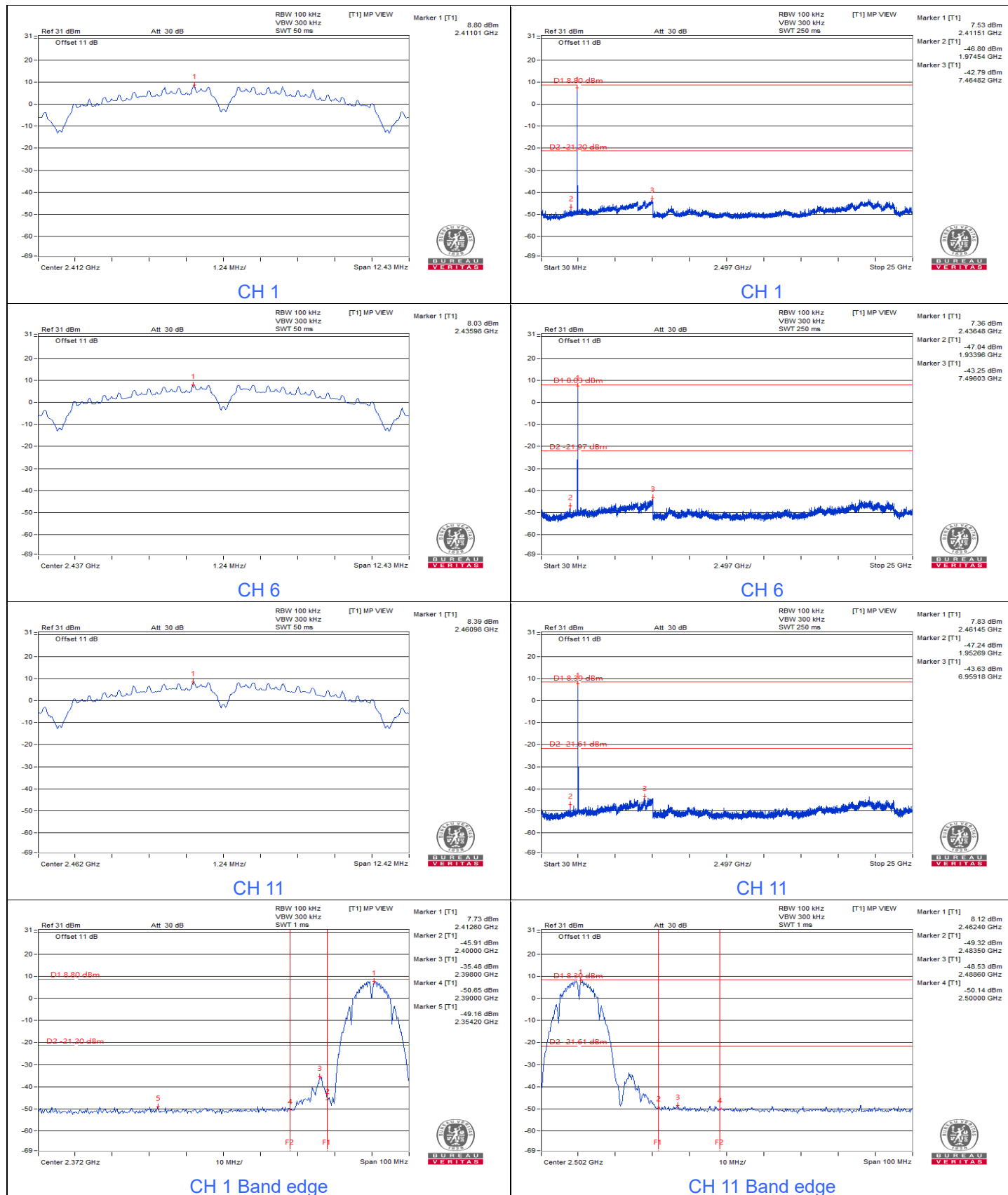
Spectrum Plot of Minimum Value



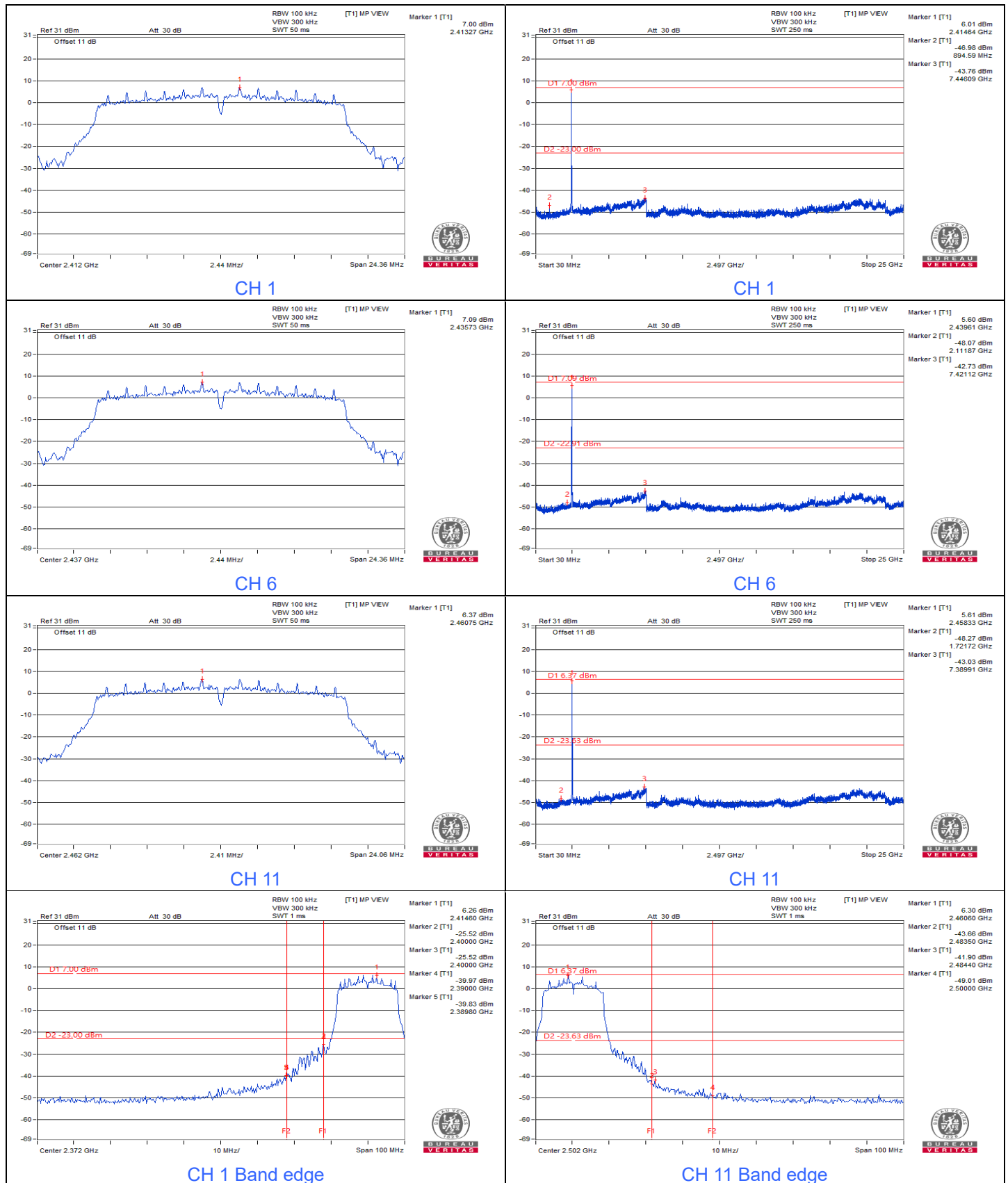
7.4 Conducted Out of Band Emissions

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Jisyoung Wang
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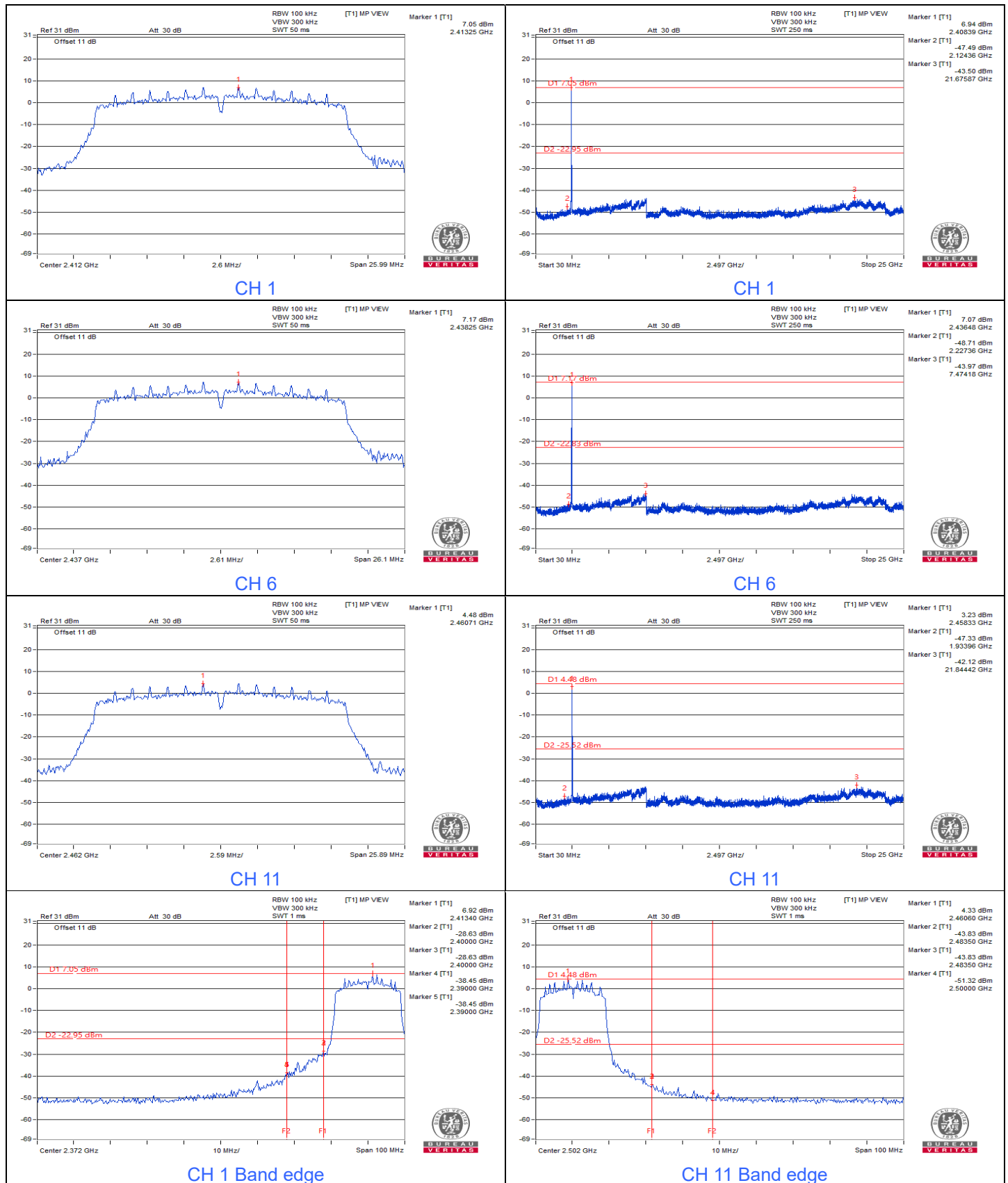
802.11b



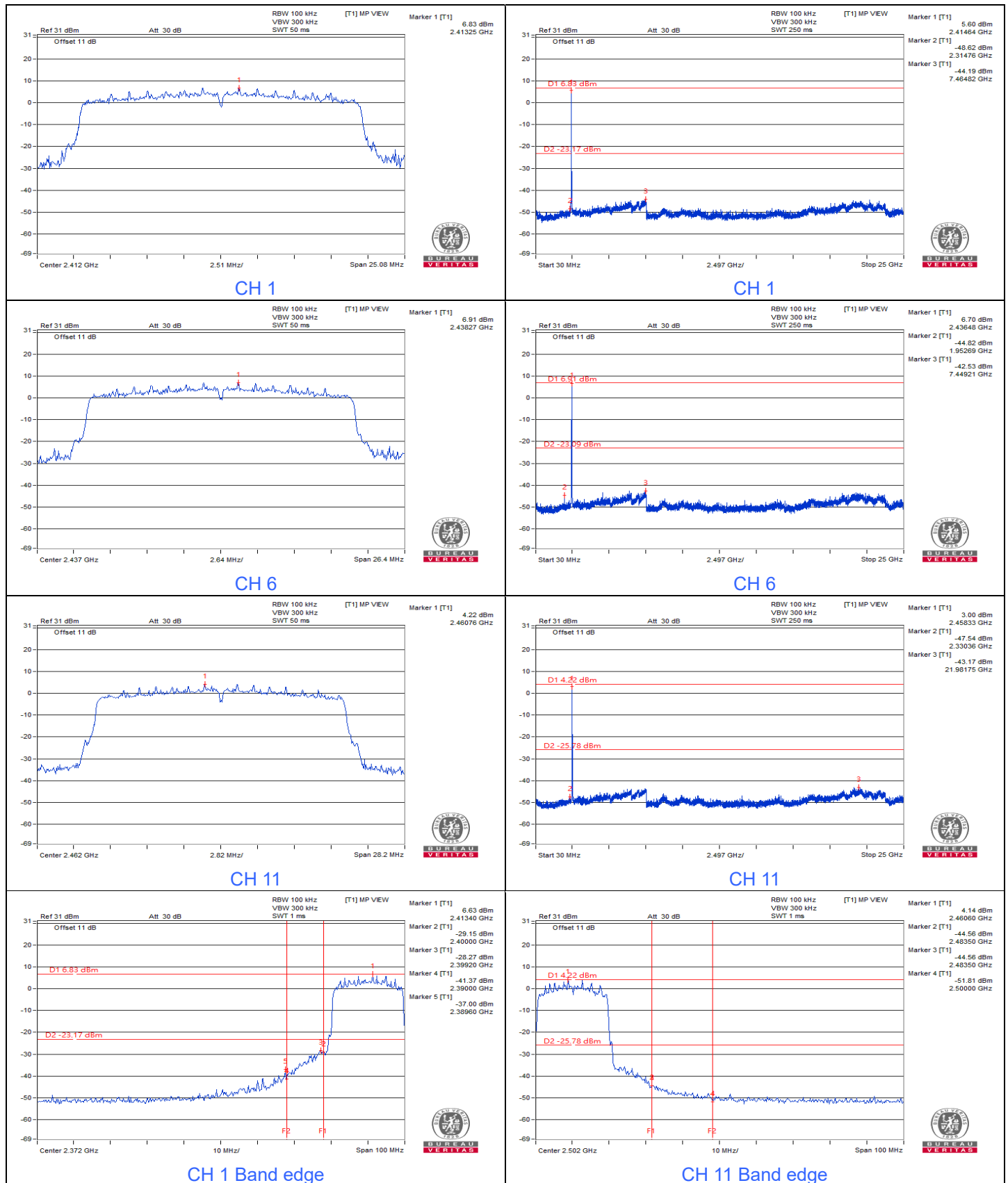
802.11g



VHT20



802.11ax (HE20)



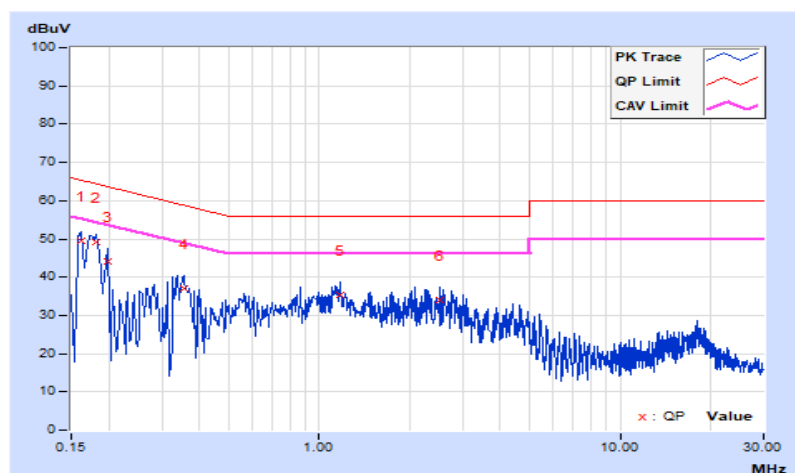
7.5 AC Power Conducted Emissions

RF Mode	802.11b	Channel	CH 11 : 2462 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Greg Lin		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16190	9.69	39.64	22.77	49.33	32.46	65.37	55.37	-16.04	-22.91
2	0.18200	9.70	39.29	26.91	48.99	36.61	64.39	54.39	-15.40	-17.78
3	0.19800	9.71	34.51	13.41	44.22	23.12	63.69	53.69	-19.47	-30.57
4	0.35400	9.72	27.33	13.90	37.05	23.62	58.87	48.87	-21.82	-25.25
5	1.17000	9.79	25.71	11.01	35.50	20.80	56.00	46.00	-20.50	-25.20
6	2.51000	9.81	24.26	10.93	34.07	20.74	56.00	46.00	-21.93	-25.26

Remarks:

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

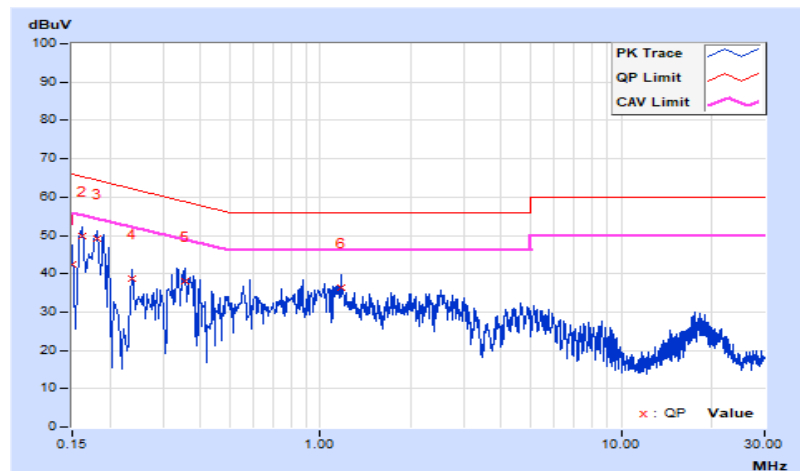


RF Mode	802.11b	Channel	CH 11 : 2462 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Greg Lin		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.66	32.62	10.67	42.28	20.33	66.00	56.00	-23.72	-35.67
2	0.16190	9.66	40.01	23.12	49.67	32.78	65.37	55.37	-15.70	-22.59
3	0.18180	9.66	39.66	26.72	49.32	36.38	64.40	54.40	-15.08	-18.02
4	0.23800	9.67	29.04	9.63	38.71	19.30	62.17	52.17	-23.46	-32.87
5	0.35400	9.71	28.33	13.73	38.04	23.44	58.87	48.87	-20.83	-25.43
6	1.17400	9.81	26.55	12.02	36.36	21.83	56.00	46.00	-19.64	-24.17

Remarks:

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



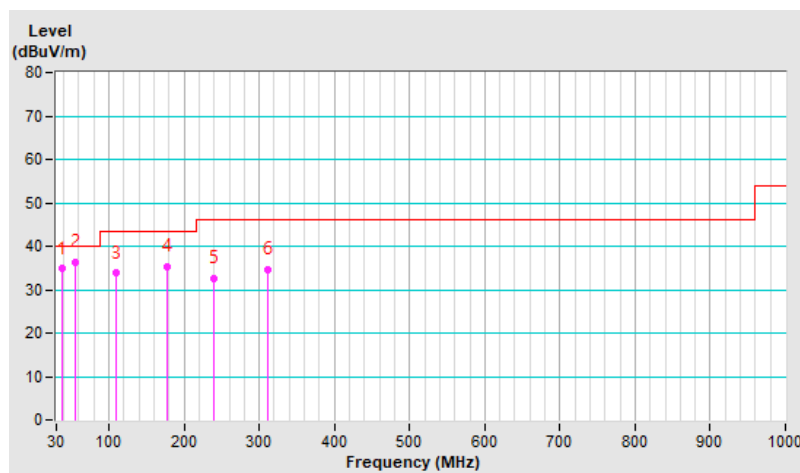
7.6 Unwanted Emissions below 1 GHz

RF Mode	802.11b	Channel	CH 11 : 2462 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Jed 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	37.86	34.8 QP	40.0	-5.2	1.23 H	322	44.5	-9.7
2	55.61	36.2 QP	40.0	-3.8	1.14 H	324	45.0	-8.8
3	108.67	33.8 QP	43.5	-9.7	1.38 H	360	45.5	-11.7
4	177.83	35.3 QP	43.5	-8.2	1.78 H	342	44.1	-8.8
5	239.08	32.7 QP	46.0	-13.3	1.65 H	108	41.3	-8.6
6	310.81	34.5 QP	46.0	-11.5	1.08 H	141	39.8	-5.3

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 of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

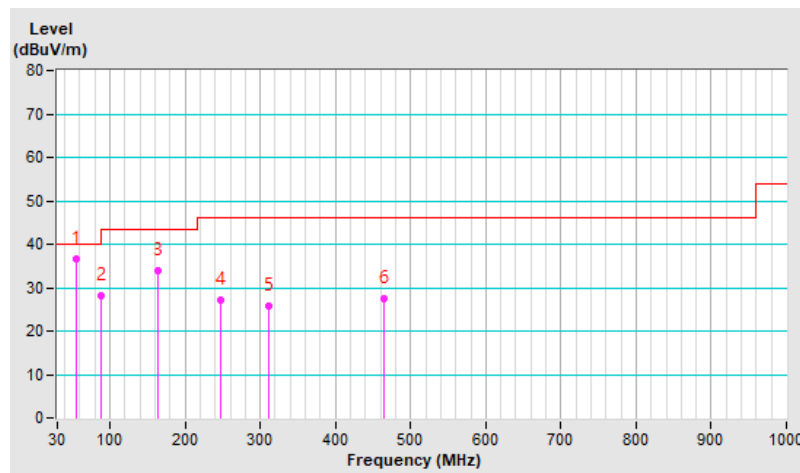


RF Mode	802.11b	Channel	CH 11 : 2462 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Jed Wu		

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	54.25	36.6 QP	40.0	-3.4	1.36 V	240	45.5	-8.9
2	87.42	28.1 QP	40.0	-11.9	1.24 V	101	42.1	-14.0
3	164.20	34.0 QP	43.5	-9.5	1.57 V	137	42.0	-8.0
4	246.70	27.2 QP	46.0	-18.8	1.89 V	305	35.1	-7.9
5	310.86	25.9 QP	46.0	-20.1	1.12 V	263	31.2	-5.3
6	464.80	27.5 QP	46.0	-18.5	1.65 V	132	29.4	-1.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The 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=200 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25.2 °C, 74.3% RH
Tested By	Jed 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	52.1 PK	74.0	-21.9	1.88 H	274	53.3	-1.2
2	2390.00	40.8 AV	54.0	-13.2	1.88 H	274	42.0	-1.2
3	*2412.00	102.9 PK			1.88 H	274	104.0	-1.1
4	*2412.00	99.4 AV			1.88 H	274	100.5	-1.1
5	4824.00	46.2 PK	74.0	-27.8	1.74 H	296	38.8	7.4
6	4824.00	35.4 AV	54.0	-18.6	1.74 H	296	28.0	7.4
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	52.4 PK	74.0	-21.6	1.22 V	332	53.6	-1.2
2	2390.00	41.1 AV	54.0	-12.9	1.22 V	332	42.3	-1.2
3	*2412.00	105.4 PK			1.22 V	332	106.5	-1.1
4	*2412.00	101.2 AV			1.22 V	332	102.3	-1.1
5	4824.00	46.5 PK	74.0	-27.5	1.04 V	313	39.1	7.4
6	4824.00	35.7 AV	54.0	-18.3	1.04 V	313	28.3	7.4

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	802.11b	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=200 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25.2 °C, 74.3% RH
Tested By	Jed 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	*2437.00	102.9 PK			1.66 H	273	103.9	-1.0
2	*2437.00	99.4 AV			1.66 H	273	100.4	-1.0
3	4874.00	46.4 PK	74.0	-27.6	1.74 H	296	38.7	7.7
4	4874.00	35.6 AV	54.0	-18.4	1.74 H	296	27.9	7.7
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	105.4 PK			1.00 V	332	106.4	-1.0
2	*2437.00	102.0 AV			1.00 V	332	103.0	-1.0
3	4874.00	46.7 PK	74.0	-27.3	1.26 V	314	39.0	7.7
4	4874.00	35.9 AV	54.0	-18.1	1.26 V	314	28.2	7.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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=200 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25.2 °C, 74.3% RH
Tested By	Jed 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	103.1 PK			1.86 H	273	103.8	-0.7
2	*2462.00	99.7 AV			1.86 H	273	100.4	-0.7
3	2483.50	54.0 PK	74.0	-20.0	1.86 H	273	54.5	-0.5
4	2483.50	41.9 AV	54.0	-12.1	1.86 H	273	42.4	-0.5
5	4924.00	46.9 PK	74.0	-27.1	1.72 H	296	39.0	7.9
6	4924.00	36.1 AV	54.0	-17.9	1.72 H	296	28.2	7.9
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	*2462.00	106.0 PK			1.20 V	333	106.7	-0.7
2	*2462.00	102.6 AV			1.20 V	333	103.3	-0.7
3	2483.50	54.3 PK	74.0	-19.7	1.20 V	333	54.8	-0.5
4	2483.50	42.2 AV	54.0	-11.8	1.20 V	333	42.7	-0.5
5	4924.00	47.2 PK	74.0	-26.8	1.02 V	314	39.3	7.9
6	4924.00	36.4 AV	54.0	-17.6	1.02 V	314	28.5	7.9

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 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=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25.2 °C, 74.3% RH
Tested By	Jed 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	60.5 PK	74.0	-13.5	1.89 H	273	61.7	-1.2
2	2390.00	44.7 AV	54.0	-9.3	1.89 H	273	45.9	-1.2
3	*2412.00	102.4 PK			1.89 H	273	103.5	-1.1
4	*2412.00	94.4 AV			1.89 H	273	95.5	-1.1
5	4824.00	45.7 PK	74.0	-28.3	1.74 H	295	38.3	7.4
6	4824.00	34.9 AV	54.0	-19.1	1.74 H	295	27.5	7.4
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	61.9 PK	74.0	-12.1	1.22 V	332	63.1	-1.2
2	2390.00	45.3 AV	54.0	-8.7	1.22 V	332	46.5	-1.2
3	*2412.00	104.9 PK			1.22 V	332	106.0	-1.1
4	*2412.00	97.0 AV			1.22 V	332	98.1	-1.1
5	4824.00	46.0 PK	74.0	-28.0	1.03 V	313	38.6	7.4
6	4824.00	35.2 AV	54.0	-18.8	1.03 V	313	27.8	7.4

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	802.11g	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=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25.2 °C, 74.3% RH
Tested By	Jed 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	*2437.00	103.5 PK			1.65 H	273	104.5	-1.0
2	*2437.00	95.5 AV			1.65 H	273	96.5	-1.0
3	4874.00	47.0 PK	74.0	-27.0	1.74 H	296	39.3	7.7
4	4874.00	36.2 AV	54.0	-17.8	1.74 H	296	28.5	7.7
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	106.0 PK			1.00 V	332	107.0	-1.0
2	*2437.00	97.9 AV			1.00 V	332	98.9	-1.0
3	4874.00	47.3 PK	74.0	-26.7	1.25 V	314	39.6	7.7
4	4874.00	36.5 AV	54.0	-17.5	1.25 V	314	28.8	7.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25.2 °C, 74.3% RH
Tested By	Jed 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	103.5 PK			1.85 H	273	104.2	-0.7
2	*2462.00	95.1 AV			1.85 H	273	95.8	-0.7
3	2483.50	62.5 PK	74.0	-11.5	1.85 H	273	63.0	-0.5
4	2483.50	48.3 AV	54.0	-5.7	1.85 H	273	48.8	-0.5
5	4924.00	47.3 PK	74.0	-26.7	1.71 H	295	39.4	7.9
6	4924.00	36.5 AV	54.0	-17.5	1.71 H	295	28.6	7.9
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	*2462.00	106.3 PK			1.20 V	333	107.0	-0.7
2	*2462.00	98.3 AV			1.20 V	333	99.0	-0.7
3	2483.50	64.7 PK	74.0	-9.3	1.20 V	333	65.2	-0.5
4	2483.50	50.5 AV	54.0	-3.5	1.20 V	333	51.0	-0.5
5	4924.00	47.5 PK	74.0	-26.5	1.03 V	313	39.6	7.9
6	4924.00	36.7 AV	54.0	-17.3	1.03 V	313	28.8	7.9

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	VHT20	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=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25.2 °C, 74.3% RH
Tested By	Jed 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	68.5 PK	74.0	-5.5	1.89 H	27	69.7	-1.2
2	2390.00	47.2 AV	54.0	-6.8	1.89 H	27	48.4	-1.2
3	*2412.00	105.0 PK			1.89 H	27	106.1	-1.1
4	*2412.00	93.2 AV			1.89 H	27	94.3	-1.1
5	4824.00	48.1 PK	74.0	-25.9	1.75 H	50	40.7	7.4
6	4824.00	37.3 AV	54.0	-16.7	1.75 H	50	29.9	7.4
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	70.1 PK	74.0	-3.9	1.23 V	87	71.3	-1.2
2	2390.00	48.8 AV	54.0	-5.2	1.23 V	87	50.0	-1.2
3	*2412.00	107.3 PK			1.23 V	87	108.4	-1.1
4	*2412.00	95.4 AV			1.23 V	87	96.5	-1.1
5	4824.00	48.4 PK	74.0	-25.6	1.02 V	68	41.0	7.4
6	4824.00	37.6 AV	54.0	-16.4	1.02 V	68	30.2	7.4

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	VHT20	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=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25.2 °C, 74.3% RH
Tested By	Jed 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	*2437.00	104.9 PK			1.67 H	275	105.9	-1.0
2	*2437.00	94.3 AV			1.67 H	275	95.3	-1.0
3	4874.00	49.0 PK	74.0	-25.0	1.74 H	297	41.3	7.7
4	4874.00	38.2 AV	54.0	-15.8	1.74 H	297	30.5	7.7
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	108.0 PK			1.00 V	334	109.0	-1.0
2	*2437.00	96.2 AV			1.00 V	334	97.2	-1.0
3	4874.00	48.3 PK	74.0	-25.7	1.27 V	315	40.6	7.7
4	4874.00	38.5 AV	54.0	-15.5	1.27 V	315	30.8	7.7

Remarks:

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

RF Mode	VHT20	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=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25.2 °C, 74.3% RH
Tested By	Jed 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	102.6 PK			1.85 H	270	103.3	-0.7
2	*2462.00	91.1 AV			1.85 H	270	91.8	-0.7
3	2483.50	68.0 PK	74.0	-6.0	1.85 H	270	68.5	-0.5
4	2483.50	48.6 AV	54.0	-5.4	1.85 H	270	49.1	-0.5
5	4924.00	49.9 PK	74.0	-24.1	1.68 H	296	42.0	7.9
6	4924.00	39.1 AV	54.0	-14.9	1.68 H	296	31.2	7.9
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	*2462.00	106.0 PK			1.21 V	337	106.7	-0.7
2	*2462.00	94.3 AV			1.21 V	337	95.0	-0.7
3	2483.50	68.2 PK	74.0	-5.8	1.21 V	337	68.7	-0.5
4	2483.50	50.0 AV	54.0	-4.0	1.21 V	337	50.5	-0.5
5	4924.00	50.1 PK	74.0	-23.9	1.03 V	316	42.2	7.9
6	4924.00	39.3 AV	54.0	-14.7	1.03 V	316	31.4	7.9

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	802.11ax (HE20)	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=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25.2 °C, 74.3% RH
Tested By	Jed 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	68.9 PK	74.0	-5.1	1.90 H	272	70.1	-1.2
2	2390.00	47.8 AV	54.0	-6.2	1.90 H	272	49.0	-1.2
3	*2412.00	105.7 PK			1.90 H	272	106.8	-1.1
4	*2412.00	94.0 AV			1.90 H	272	95.1	-1.1
5	4824.00	48.7 PK	74.0	-25.3	1.74 H	295	41.3	7.4
6	4824.00	37.9 AV	54.0	-16.1	1.74 H	295	30.5	7.4
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	70.2 PK	74.0	-3.8	1.23 V	332	71.4	-1.2
2	2390.00	48.6 AV	54.0	-5.4	1.23 V	332	49.8	-1.2
3	*2412.00	107.9 PK			1.23 V	332	109.0	-1.1
4	*2412.00	96.2 AV			1.23 V	332	97.3	-1.1
5	4824.00	49.0 PK	74.0	-25.0	1.03 V	313	41.6	7.4
6	4824.00	38.2 AV	54.0	-15.8	1.03 V	313	30.8	7.4

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	802.11ax (HE20)	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=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25.2 °C, 74.3% RH
Tested By	Jed 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	*2437.00	106.1 PK			1.66 H	273	107.1	-1.0
2	*2437.00	95.5 AV			1.66 H	273	96.5	-1.0
3	4874.00	50.2 PK	74.0	-23.8	1.74 H	295	42.5	7.7
4	4874.00	39.4 AV	54.0	-14.6	1.74 H	295	31.7	7.7
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	109.2 PK			1.00 V	332	110.2	-1.0
2	*2437.00	97.4 AV			1.00 V	332	98.4	-1.0
3	4874.00	49.5 PK	74.0	-24.5	1.26 V	313	41.8	7.7
4	4874.00	39.7 AV	54.0	-14.3	1.26 V	313	32.0	7.7

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25.2 °C, 74.3% RH
Tested By	Jed 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	103.1 PK			1.84 H	272	103.8	-0.7
2	*2462.00	91.8 AV			1.84 H	272	92.5	-0.7
3	2483.50	68.1 PK	74.0	-5.9	1.84 H	272	68.6	-0.5
4	2483.50	49.5 AV	54.0	-4.5	1.84 H	272	50.0	-0.5
5	4924.00	50.3 PK	74.0	-23.7	1.71 H	294	42.4	7.9
6	4924.00	39.5 AV	54.0	-14.5	1.71 H	294	31.6	7.9
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	*2462.00	106.6 PK			1.21 V	334	107.3	-0.7
2	*2462.00	94.8 AV			1.21 V	334	95.5	-0.7
3	2483.50	69.4 PK	74.0	-4.6	1.21 V	334	69.9	-0.5
4	2483.50	50.3 AV	54.0	-3.7	1.21 V	334	50.8	-0.5
5	4924.00	50.5 PK	74.0	-23.5	1.02 V	313	42.6	7.9
6	4924.00	39.7 AV	54.0	-14.3	1.02 V	313	31.8	7.9

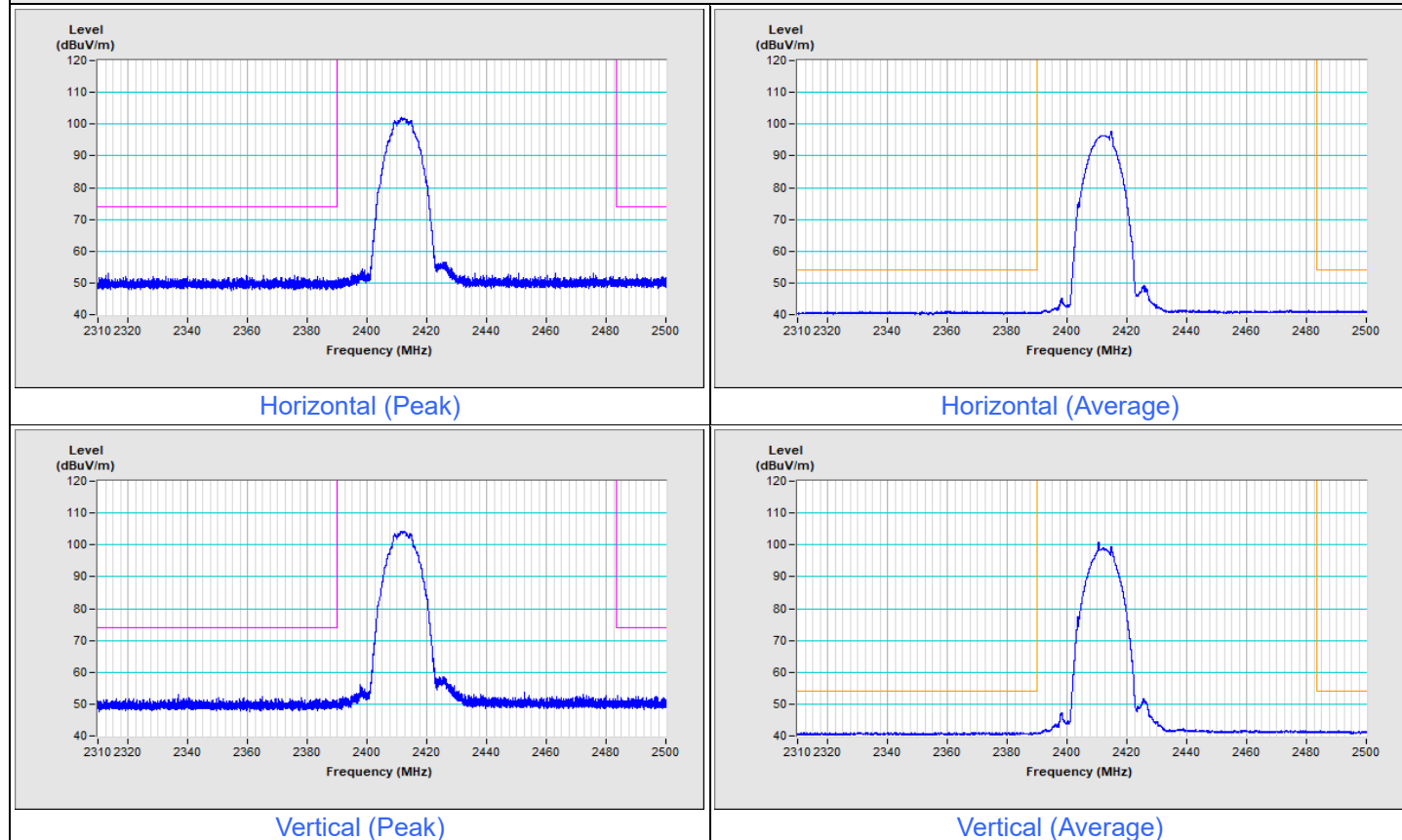
Remarks:

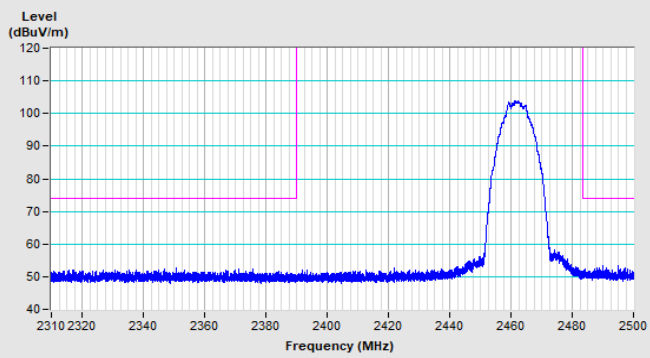
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency,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

Plot of Band Edge

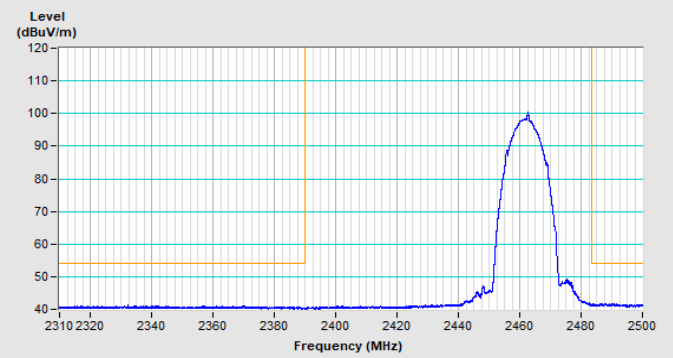
Frequency Range	2.31 GHz ~ 2.5 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
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802.11b Channel 1

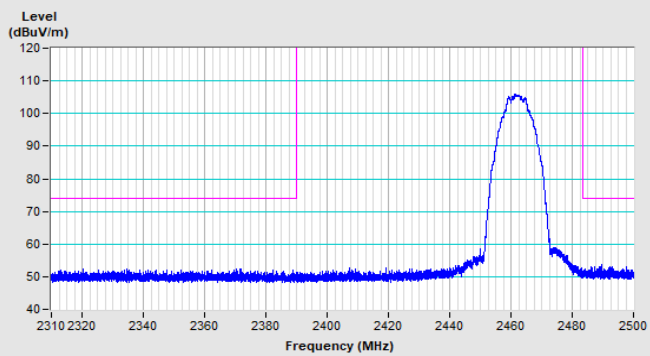


802.11b Channel 11

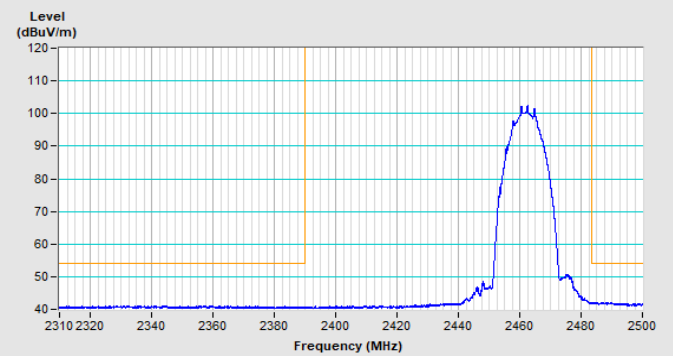
Horizontal (Peak)



Horizontal (Average)



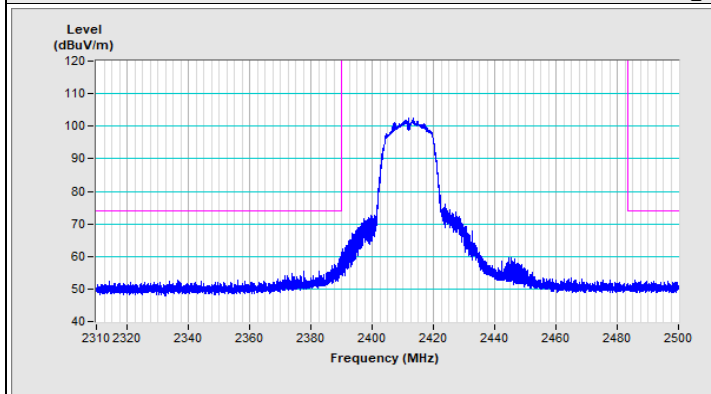
Vertical (Peak)



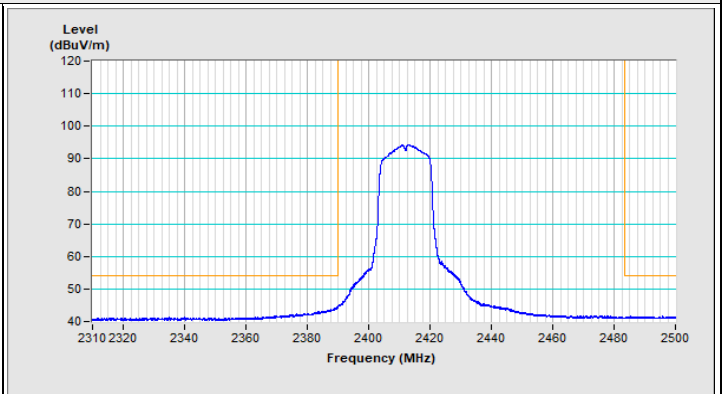
Vertical (Average)

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=1 kHz, DET=Peak
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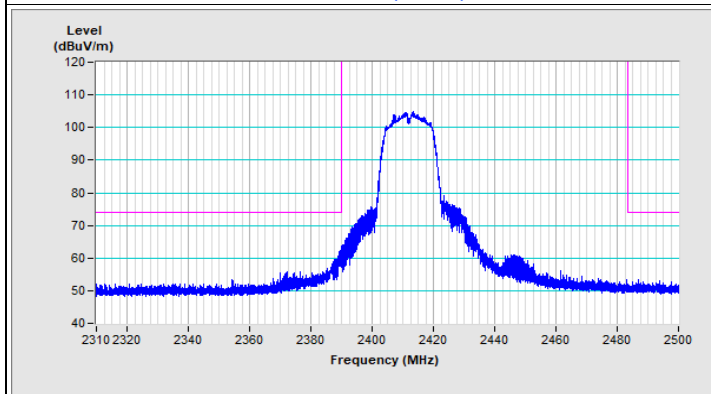
802.11g Channel 1



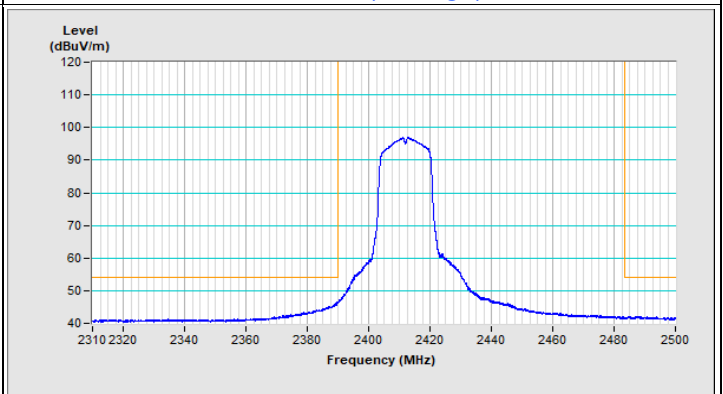
Horizontal (Peak)



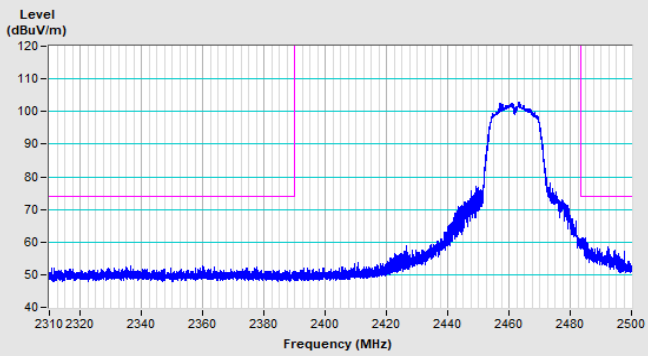
Horizontal (Average)



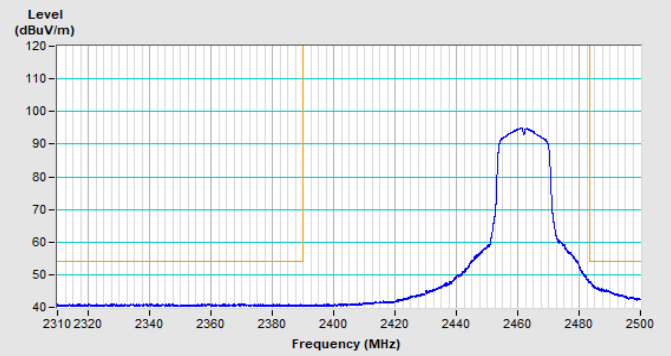
Vertical (Peak)



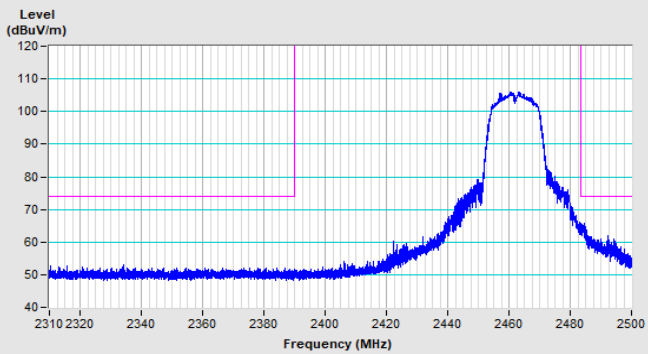
Vertical (Average)

802.11g Channel 11

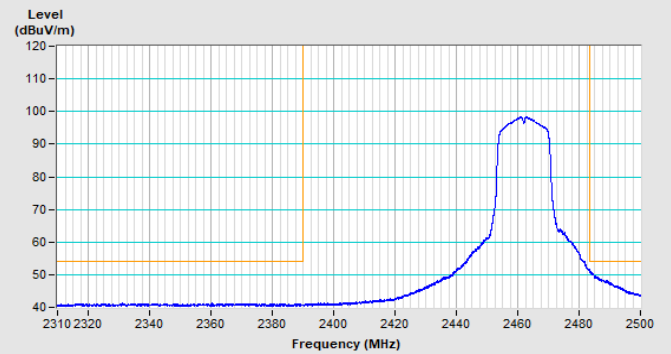
Horizontal (Peak)



Horizontal (Average)



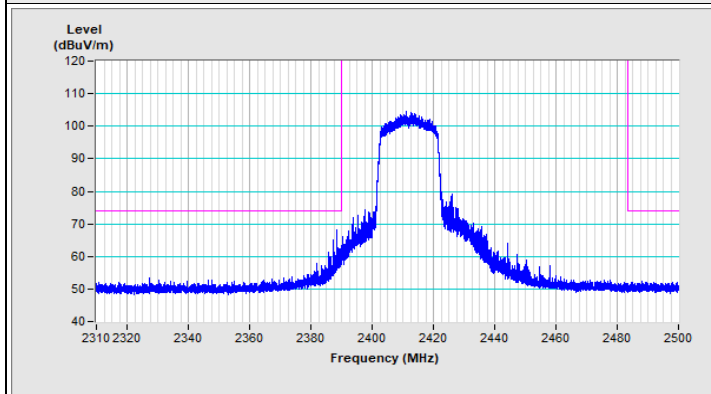
Vertical (Peak)



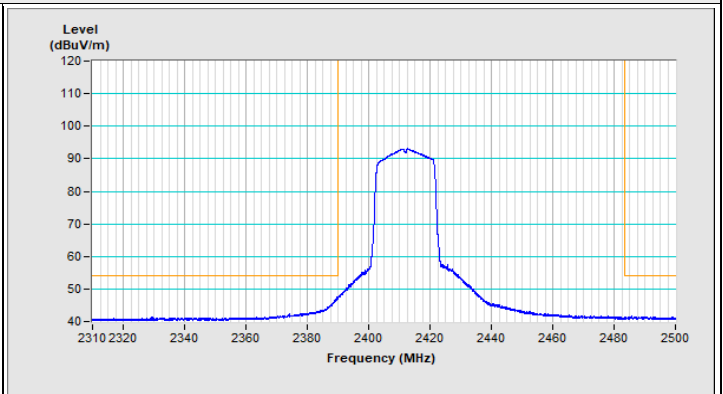
Vertical (Average)

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=1 kHz, DET=Peak
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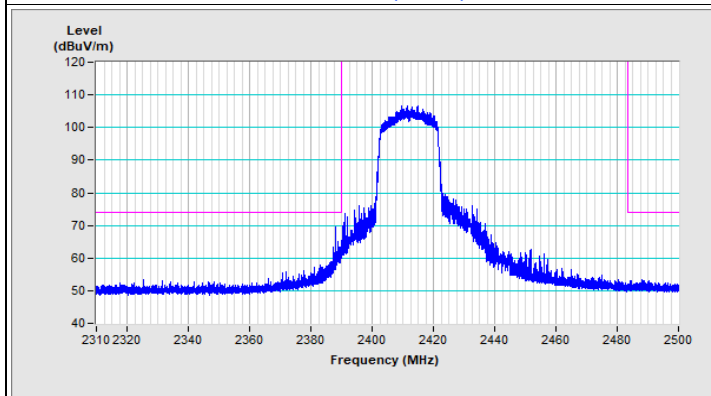
VHT20 Channel 1



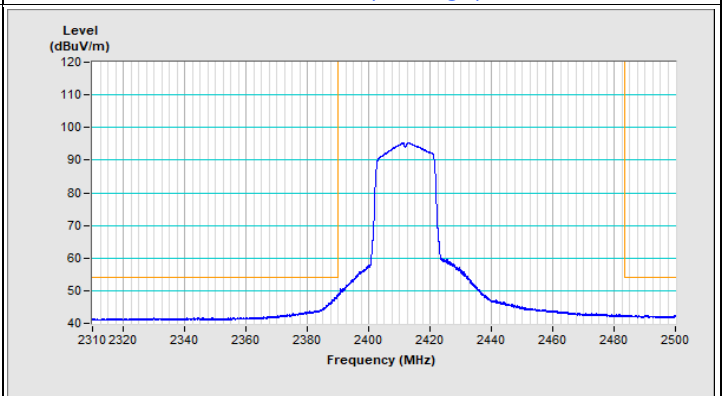
Horizontal (Peak)



Horizontal (Average)

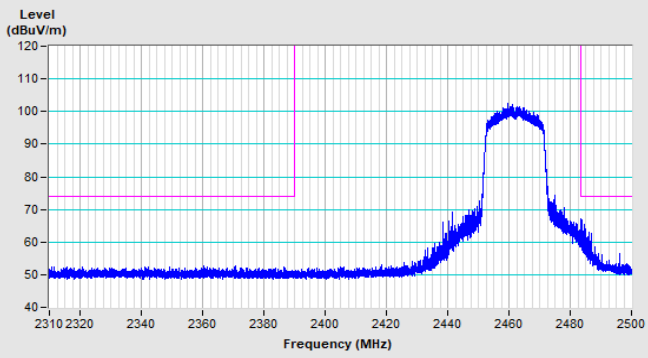


Vertical (Peak)

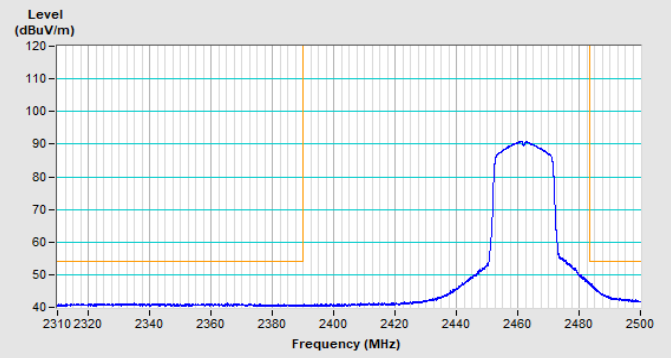


Vertical (Average)

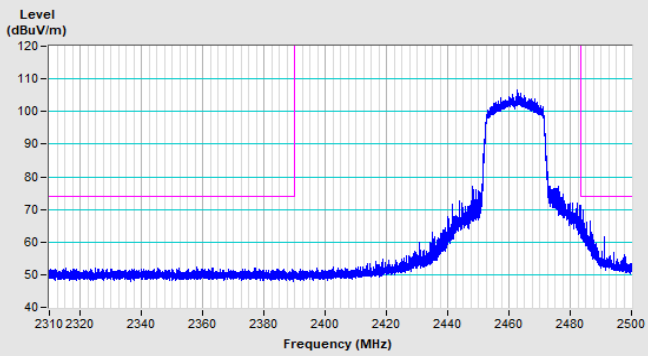
VHT20 Channel 11



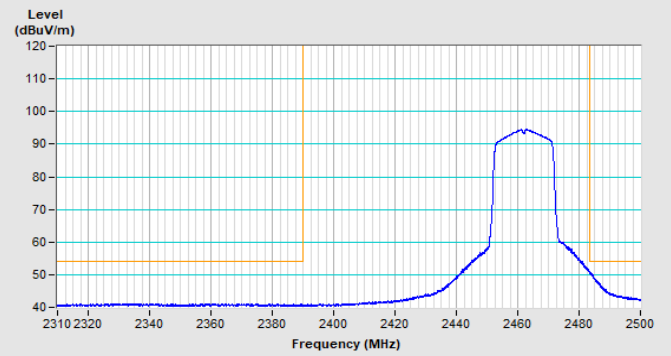
Horizontal (Peak)



Horizontal (Average)



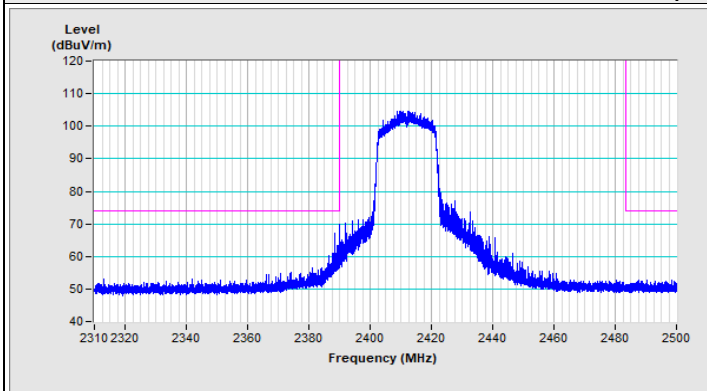
Vertical (Peak)



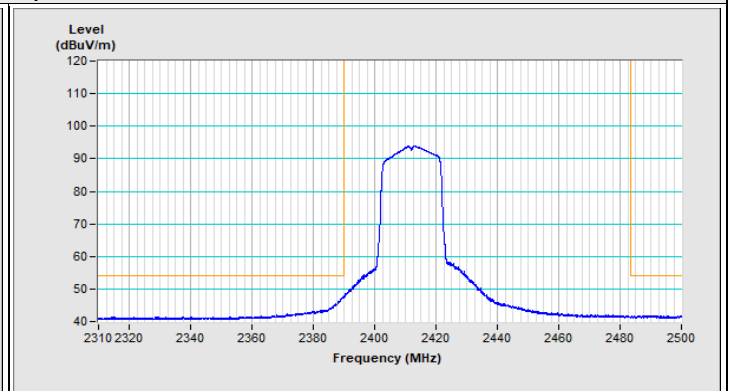
Vertical (Average)

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=1 kHz, DET=Peak
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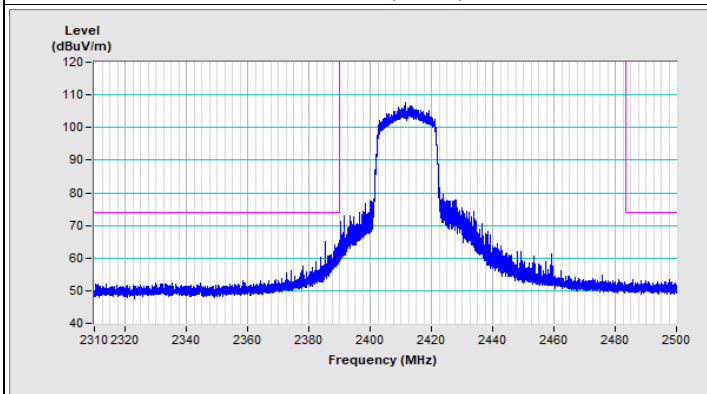
802.11ax (HE20) Channel 1



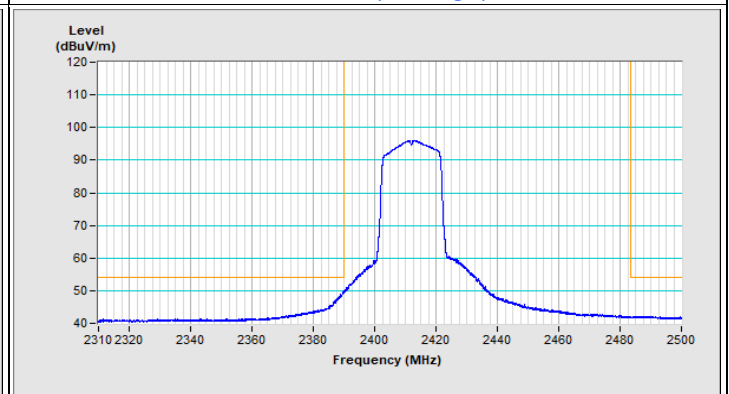
Horizontal (Peak)



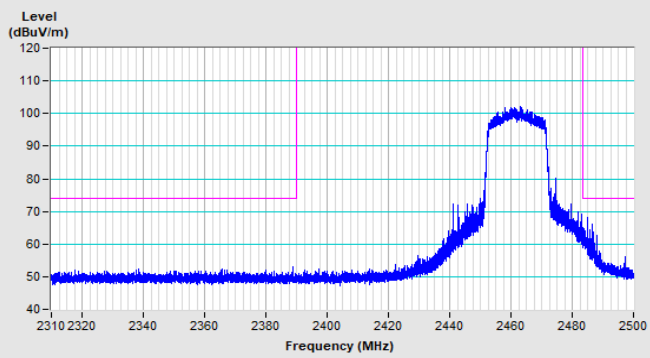
Horizontal (Average)



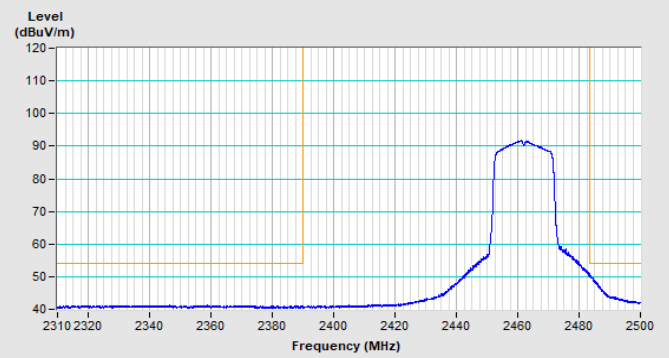
Vertical (Peak)



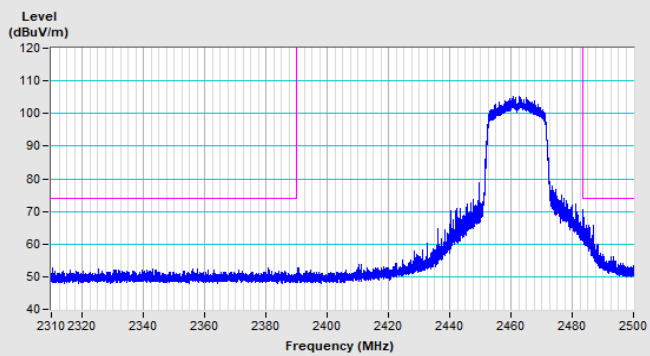
Vertical (Average)

802.11ax (HE20) Channel 11

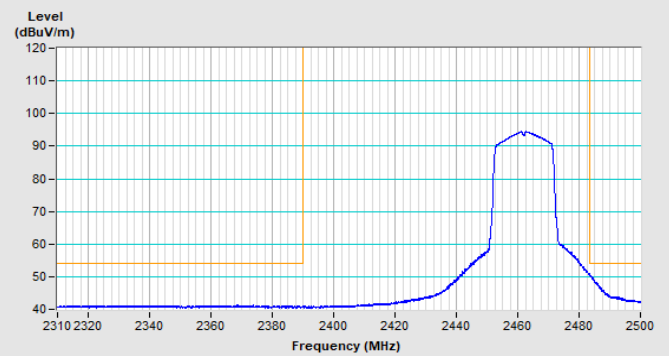
Horizontal (Peak)



Horizontal (Average)



Vertical (Peak)



Vertical (Average)

8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

9 Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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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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