

TEST REPORT

CERTIFICATE OF CONFORMITY

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

Report No.: RFBEIH-WTW-P24110374-1

FCC ID: P27-SCE5172N48

Product: Moso Canopy 5GID2, QuadBridge mini

Brand: Mosolabs, Moso Networks, Sercomm

Model No.: SCE5172-n48

Received Date: 2024/11/19

Test Date: 2024/12/24 ~ 2025/1/2

Issued Date: 2025/3/7

Applicant: Sercomm Corp.

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FCC Registration / 788550 / TW0003 for Test Location(1)

Designation Number: 281270 / TW0032 for Test Location(2)

Approved by: Jeremy Lin, **Date:** 2025/3/7
Jeremy Lin / Project Engineer

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Prepared by : Pettie Chen / Senior Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBEIH-WTW-P24110374-1	Original release.	2025/3/7

1 Certificate

Product: Moso Canopy 5GID2, QuadBridge mini

Brand: Mosolabs, Moso Networks, Sercomm

Test Model: SCE5172-n48

Sample Status: Engineering sample

Applicant: Sercomm Corp.

Test Date: 2024/12/24 ~ 2025/1/2

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

Measurement Procedure: ANSI C63.10-2013

KDB 558074 D01 15.247 Meas Guidance v05r02

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

2 Summary of Test Results

47 CFR FCC Part 15, Subpart C (Section 15.247)			
Standard / Clause	Test Item	Result	Remark
15.247(b)	RF Output Power	Pass	Meet the requirement of limit.
15.247(e)	Power Spectral Density	Pass	Meet the requirement of limit.
15.247(a)(2)	6 dB Bandwidth	Pass	Meet the requirement of limit.
15.247(d)	Conducted Out of Band Emissions	Pass	Meet the requirement of limit.
15.207	AC Power Conducted Emissions	Pass	Minimum passing margin is -8.20 dB at 7.05800 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -0.4 dB at 86.74 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.5 dB at 2390.00 and 2483.50 MHz
15.203	Antenna Requirement	Pass	Antenna connector is MMCX not a standard connector.

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

2.1 Measurement Uncertainty

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

Parameter	Specification	Uncertainty (±)
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	2.90 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3 dB
	30 MHz ~ 1 GHz	2.93 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	1.76 dB
	18 GHz ~ 40 GHz	1.77 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	Moso Canopy 5GID2, QuadBridge mini
Brand	Mosolabs, Moso Networks, Sercomm
Test Model	SCE5172-n48
Status of EUT	Engineering sample
Power Supply Rating	12Vdc from adapter 56Vdc from PoE
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in VHT mode
Modulation Technology	DSSS, OFDM
Transfer Rate	Up to 200 Mbps
Operating Frequency	2.412 GHz ~ 2.472 GHz
Number of Channel	802.11b, 802.11g, 802.11n (HT20), VHT20: 13 802.11n (HT40), VHT40: 9
Output Power	254.097 mW (24.05 dBm)

Note:

1. List of Accessory and Support Unit:

POE (Accessory)	Brand	Delta
	Model	ADH-90AR N
	AC Input	100-240Vac, 50/60Hz, 2A
	DC Output	56Vdc, 1.61A
	DC Output Cable	shielded cable (Cat. 6A and above)
AC Adapter (Support Unit)	Brand	Mass Power Electronics Inc.
	Model	NBS100A120600M2
	AC Input	100-240Vac, 50/60Hz, 1.6A
	DC Output	12.0V, 6.0A, 72.0W
	DC Output Cable	1.5m non-shielded cable without core

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.

Gain (dBi)	Antenna Type	Connector Type
2400 ~ 2483.5 MHz		
4.83	PIFA	MMCX

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

2. The EUT provides 1 completed transmitter and 1 receiver.

2.4 GHz Band		
Modulation Mode	TX & RX Configuration	
802.11b	1TX	1RX
802.11g	1TX	1RX
802.11n (HT20)	1TX	1RX
802.11n (HT40)	1TX	1RX
VHT20	1TX	1RX
VHT40	1TX	1RX

Note:

1. The modulation and bandwidth are similar for 802.11n mode for 20 MHz (40 MHz) and VHT mode for 20 MHz (40 MHz). Therefore, the investigated worst case is the representative mode in test report.

3.3 Channel List

13 channels are provided for 802.11b, 802.11g, 802.11n (HT20), VHT20:

Channel	Frequency	Channel	Frequency
1	2412 MHz	8	2447 MHz
2	2417 MHz	9	2452 MHz
3	2422 MHz	10	2457 MHz
4	2427 MHz	11	2462 MHz
5	2432 MHz	12	2467 MHz
6	2437 MHz	13	2472 MHz
7	2442 MHz		

9 channels are provided for 802.11n (HT40), VHT40:

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

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. 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: Z-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	B	802.11b	1, 6, 11, 12, 13	DBPSK	1Mb/s
		802.11g	1, 6, 11, 12, 13	BPSK	6Mb/s
		802.11n (HT20)	1, 6, 11, 12, 13	BPSK	MCS0
		802.11n (HT40)	3, 6, 9, 10, 11	BPSK	MCS0
		VHT20	1, 6, 11, 12, 13	BPSK	MCS0
		VHT40	3, 6, 9, 10, 11	BPSK	MCS0
Power Spectral Density	B	802.11b	1, 6, 11, 12, 13	DBPSK	1Mb/s
		802.11g	1, 6, 11, 12, 13	BPSK	6Mb/s
		VHT20	1, 6, 11, 12, 13	BPSK	MCS0
		VHT40	3, 6, 9, 10, 11	BPSK	MCS0
6 dB Bandwidth / Conducted Out of Band Emissions	B	802.11b	1, 6, 11, 12, 13	DBPSK	1Mb/s
		802.11g	1, 6, 11, 12, 13	BPSK	6Mb/s
		VHT20	1, 6, 11, 12, 13	BPSK	MCS0
		VHT40	3, 6, 9, 10, 11	BPSK	MCS0
AC Power Conducted Emissions	A, B	VHT20	6	BPSK	MCS0
Unwanted Emissions below 1 GHz	A, B	VHT20	6	BPSK	MCS0
Unwanted Emissions above 1 GHz	B	802.11b	1, 6, 11, 12, 13	DBPSK	1Mb/s
		802.11g	1, 6, 11, 12, 13	BPSK	6Mb/s
		VHT20	1, 6, 11, 12, 13	BPSK	MCS0
		VHT40	3, 6, 9, 10, 11	BPSK	MCS0
EUT Configure Mode:	A	EUT+Adapter			
	B	EUT+POE			

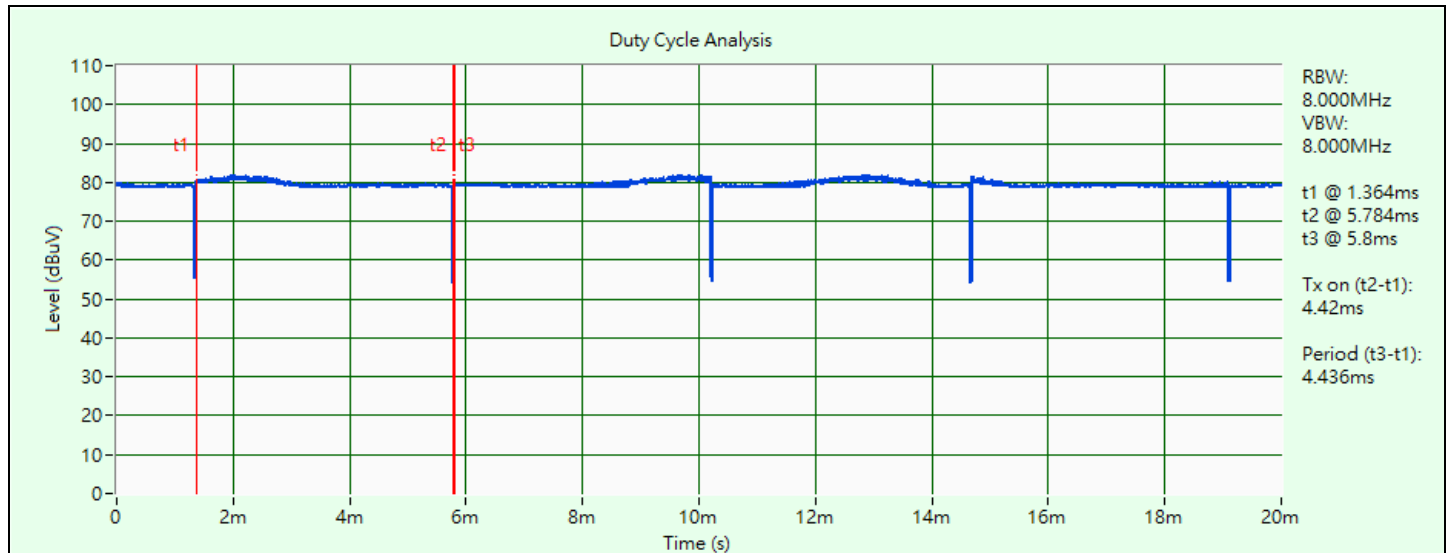
3.5 Duty Cycle of Test Signal

802.11b: Duty cycle = 4.42 ms / 4.436 ms x 100% = 99.6%

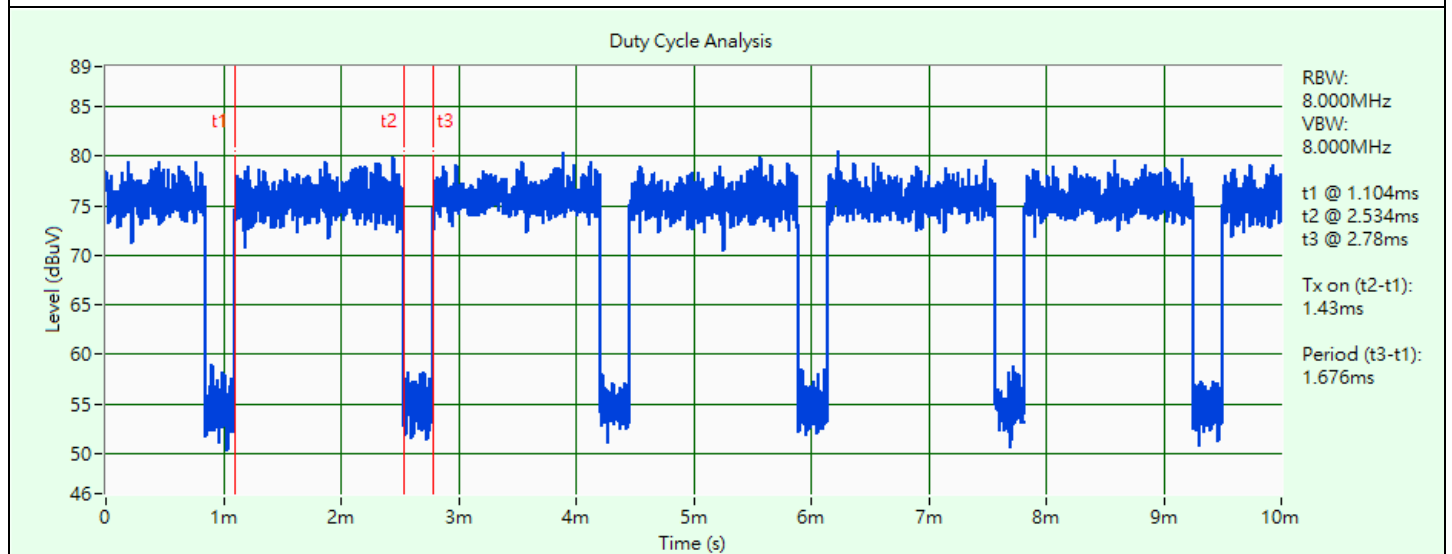
802.11g: Duty cycle = 1.43 ms / 1.676 ms x 100% = 85.3%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.69$ dB

VHT20: Duty cycle = 4.3 ms / 4.544 ms x 100% = 94.6%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.24$ dB

VHT40: Duty cycle = 2.094 ms / 2.342 ms x 100% = 89.4%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.49$ dB

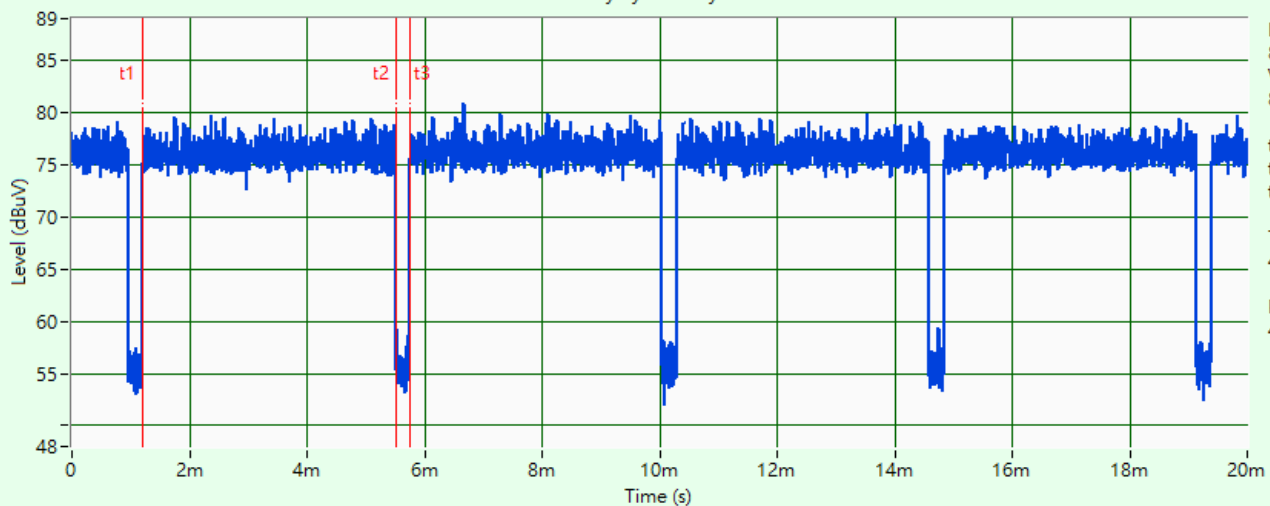


802.11b



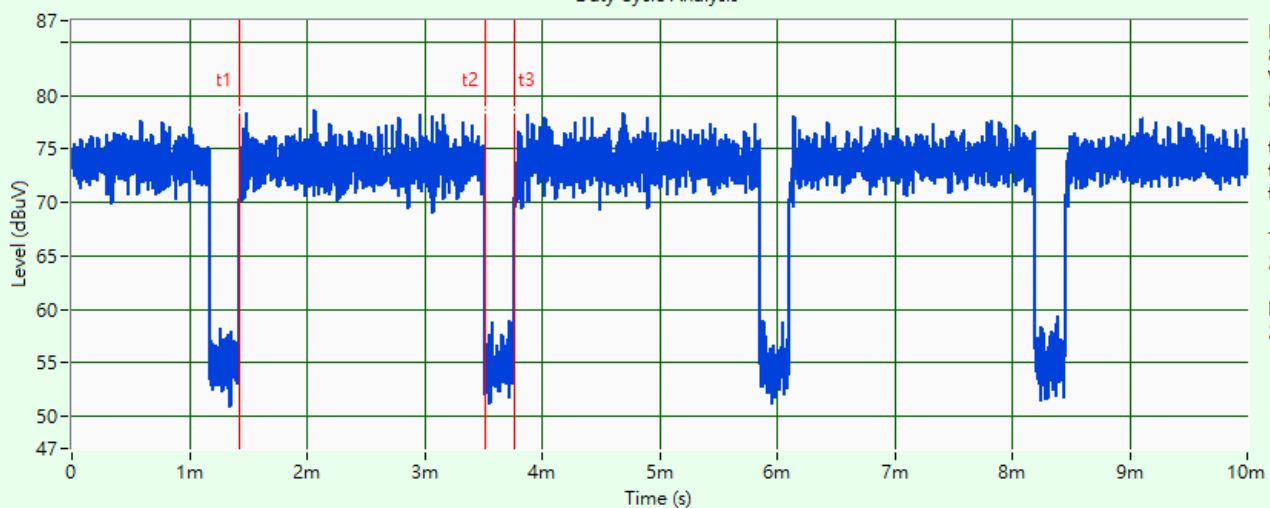
802.11g

Duty Cycle Analysis



VHT20

Duty Cycle Analysis



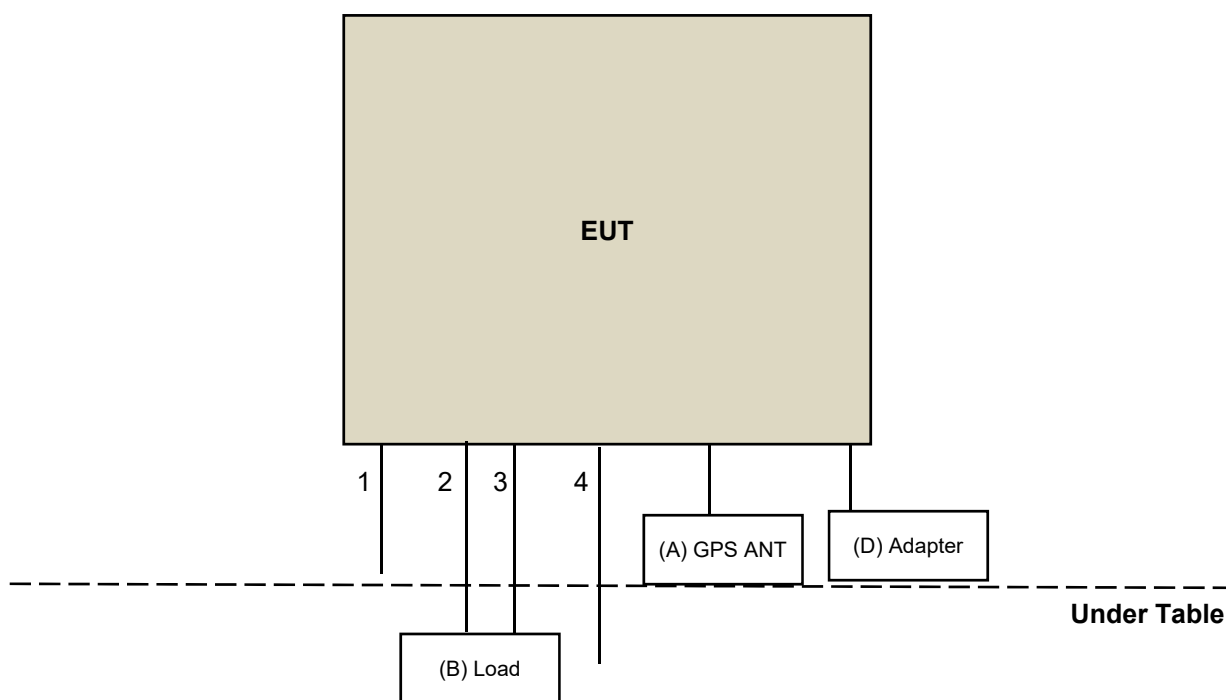
VHT40

3.6 Test Program Used and Operation Descriptions

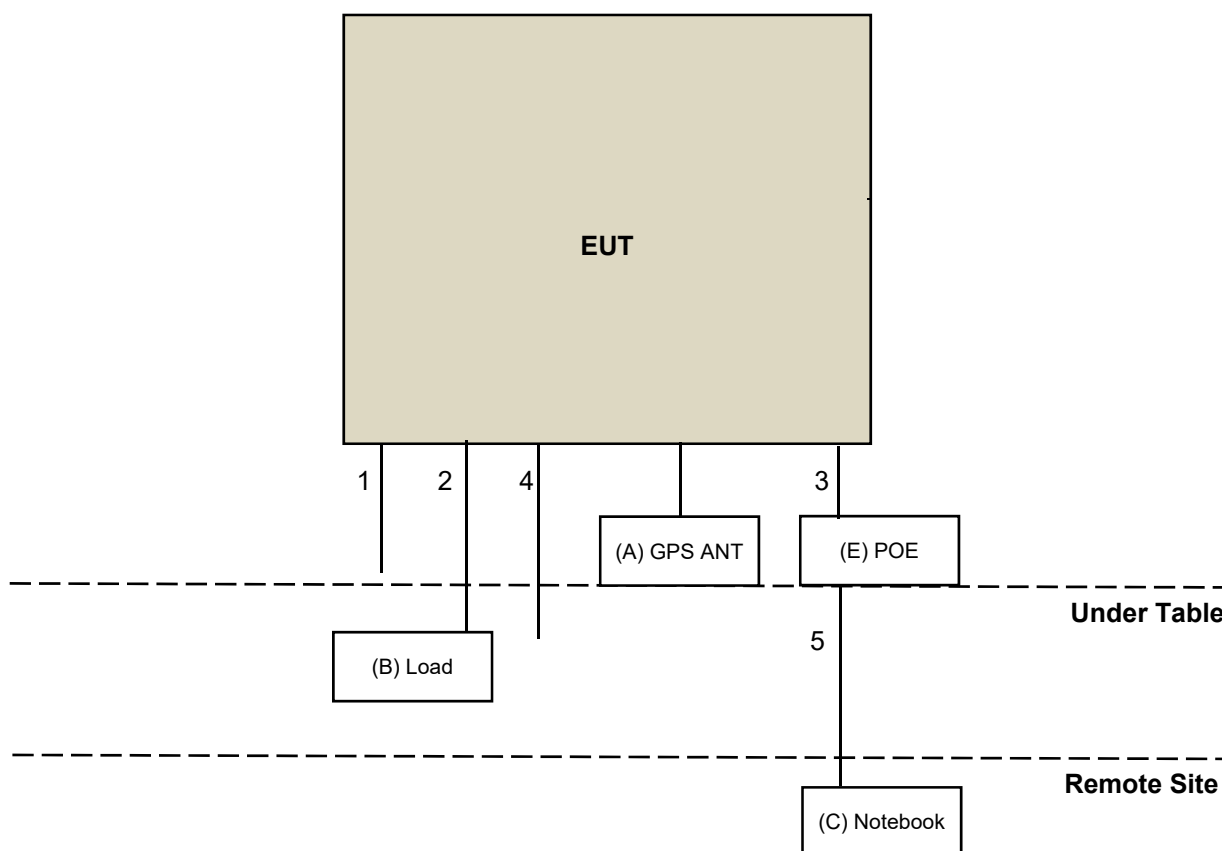
Controlling software Terminal Ver 2.10 has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices

Test Mode A



Test Mode B



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	GPS Ant	HL tronics (kunshan) co., Ltd	GPS active antenna	NA	NA	Supplied by applicant
B	Load	BV	LP-04	NA	NA	Provided by Lab
C	Notebook	Lenovo	TP00133C	NA	NA	Supplied by applicant
D	Adapter	Mass Power Electronics Inc.	NBS100A120600M2	NA	NA	Supplied by applicant
E	POE	Delta	ADH-90AR N	NA	NA	Supplied by applicant

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	Console Cable	1	0.25	No	0	Supplied by applicant
2	RJ-45 Cable	1	1.5	No	0	Provided by Lab
3	RJ-45 Cable	1	1.5	No	0	Provided by Lab
4	Fiber Cable	1	3	No	0	Provided by Lab
5	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
Peak Power Analyzer Keysight	8990B	MY51000485	2024/1/21	2025/1/20
Wideband Power Sensor Keysight	N1923A	MY58020002	2024/1/18	2025/1/17
		MY58140009	2024/1/18	2025/1/17

Notes:

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

4.2 Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Signal & Spectrum Analyzer R&S	FSV3044	101105	2024/2/27	2025/2/26
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: 2025/1/2

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 HUBER+SUHNER	E1-011277	02	2024/10/25	2025/10/24
	E1-011313	11	2024/2/1	2025/1/31
	E1-011595	21	2024/3/8	2025/3/7
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	2024/1/6	2025/1/5
LISN R&S	ENV216	101826	2024/3/25	2025/3/24
	ESH3-Z5	100311	2024/9/5	2025/9/4
RF Coaxial Cable Woken	5D-FB	Cable-cond1-01	2024/1/6	2025/1/5
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: 2025/1/2

4.6 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower Max-Full	MFT-151SS-0.5T	N/A	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-1213	2024/10/14	2025/10/13
EXA Signal Analyzer Agilent	N9010A	MY52220207	2023/12/28	2024/12/27
Loop Antenna TESEQ	HLA 6121	45745	2024/8/21	2025/8/20
MXE EMI Receiver Keysight	N9038B	MY60180019	2024/1/18	2025/1/17
Preamplifier EMCI	EMC330N	980782	2024/1/15	2025/1/14
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-500	201233	2024/1/15	2025/1/14
	EMCCFD400-NM-NM-3000	201235	2024/1/15	2025/1/14
	EMCCFD400-NM-NM-9000	201236(with PAD)	2024/1/15	2025/1/14
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	MF-7802BS	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208674	N/A	N/A

Notes:

1. The test was performed in WM - 966 chamber 8.
2. Tested Date: 2024/12/24 ~ 2024/12/26

4.7 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower Max-Full	MFT-151SS-0.5T	N/A	N/A	N/A
EXA Signal Analyzer Agilent	N9010A	MY52220207	2023/12/28	2024/12/27
Horn Antenna RFSPIN	DRH18-E	210103A18E	2024/11/10	2025/11/9
Horn Antenna Schwarzbeck	BBHA 9170	9170-1049	2024/11/10	2025/11/9
MXE EMI Receiver Keysight	N9038B	MY60180019	2024/1/18	2025/1/17
Preamplifier EMCI	EMC118A45SE	980808	2024/12/26	2025/12/25
	EMC184045SE	980788	2024/1/15	2025/1/14
RF Coaxial Cable EMCI	EMC101G-KM-KM-2000	201254	2024/1/15	2025/1/14
	EMC101G-KM-KM-3000	201258	2024/1/15	2025/1/14
	EMC101G-KM-KM-5000	201261	2024/1/15	2025/1/14
	EMC104-SM-SM-1000	210102	2024/1/15	2025/1/14
	EMC104-SM-SM-3000	201231	2024/1/15	2025/1/14
	EMC104-SM-SM-9000	201243	2024/1/15	2025/1/14
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	MF-7802BS	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208674	N/A	N/A

Notes:

1. The test was performed in WM - 966 chamber 8.
2. Tested Date: 2024/12/26 ~ 2024/12/27

5 Limits of Test Items

5.1 RF Output Power

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

5.2 Power Spectral Density

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

5.3 6 dB Bandwidth

The minimum of 6 dB Bandwidth Measurement is 0.5 MHz.

5.4 Conducted Out of Band Emissions

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

5.5 AC Power Conducted Emissions

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

Notes:

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

5.6 Unwanted Emissions below 1 GHz

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

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

Notes:

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

5.7 Unwanted Emissions above 1 GHz

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

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

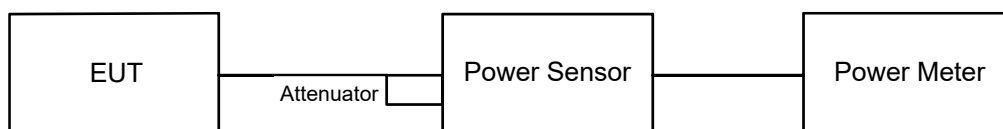
Notes:

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

6 Test Arrangements

6.1 RF Output Power

6.1.1 Test Setup



6.1.2 Test Procedure

Peak Power:

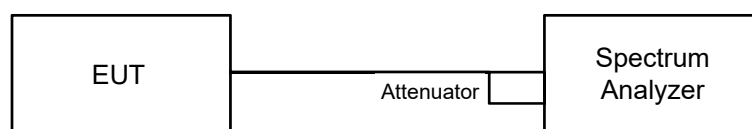
A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the power level.

Average Power:

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

6.2 Power Spectral Density

6.2.1 Test Setup

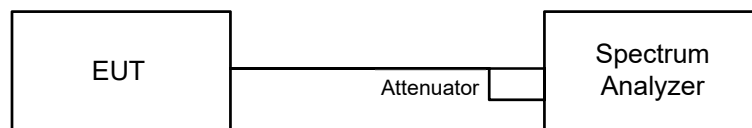


6.2.2 Test Procedure

- Set analyzer center frequency to DTS channel center frequency.
- Set the span to 1.5 times the DTS bandwidth.
- Set the RBW to: 3 kHz.
- Set the VBW $\geq 3 \times$ RBW.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum amplitude level within the RBW.

6.3 6 dB Bandwidth

6.3.1 Test Setup

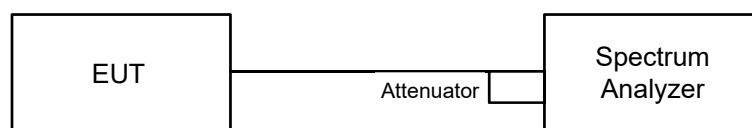


6.3.2 Test Procedure

- 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

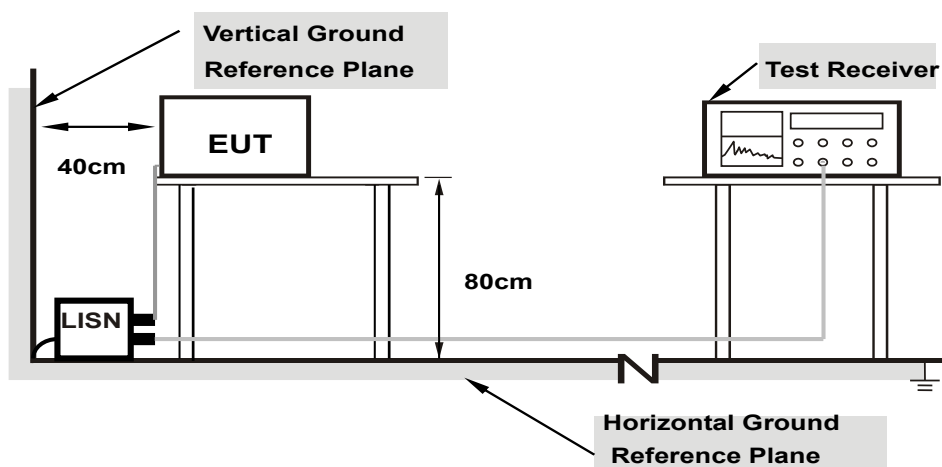
- Set the RBW = 100 kHz.
- Set the VBW ≥ 300 kHz.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

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

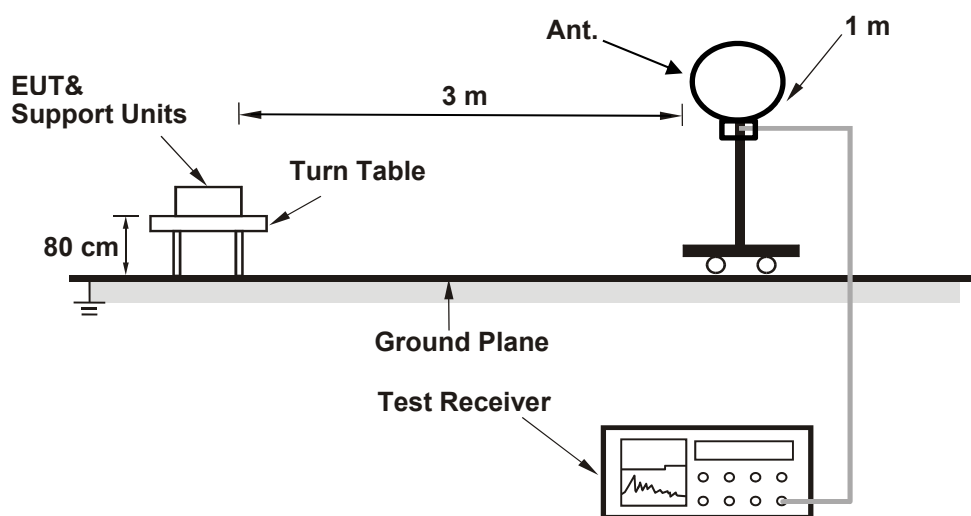
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The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

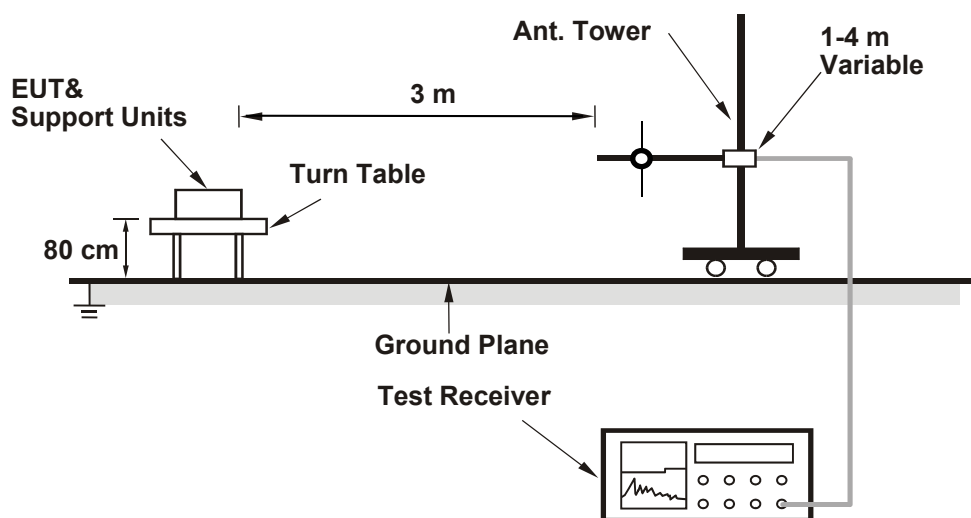
6.6 Unwanted Emissions below 1 GHz

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

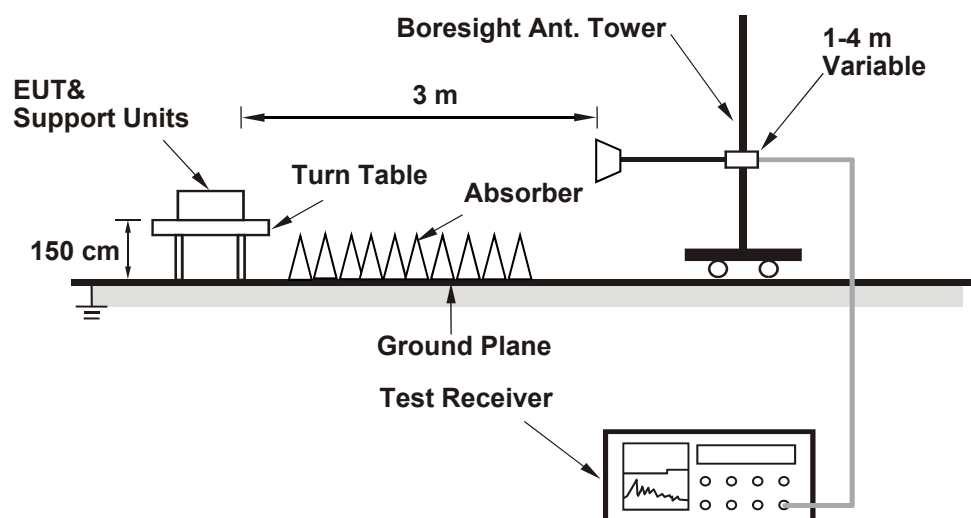
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the 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:	56 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Chris Lin
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For Peak Power

802.11b

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2412	114.288	20.58	30	Pass
6	2437	125.893	21.00	30	Pass
11	2462	127.644	21.06	30	Pass
12	2467	80.353	19.05	30	Pass
13	2472	36.644	15.64	30	Pass

Note: The antenna gain is 4.83 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2412	234.963	23.71	30	Pass
6	2437	244.343	23.88	30	Pass
11	2462	218.273	23.39	30	Pass
12	2467	177.419	22.49	30	Pass
13	2472	79.799	19.02	30	Pass

Note: The antenna gain is 4.83 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2412	189.671	22.78	30	Pass
6	2437	243.781	23.87	30	Pass
11	2462	181.552	22.59	30	Pass
12	2467	133.352	21.25	30	Pass
13	2472	57.81	17.62	30	Pass

Note: The antenna gain is 4.83 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT40)

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
3	2422	114.815	20.60	30	Pass
6	2437	204.644	23.11	30	Pass
9	2452	130.317	21.15	30	Pass
10	2457	123.31	20.91	30	Pass
11	2462	117.761	20.71	30	Pass

Note: The antenna gain is 4.83 dBi < 6 dBi, so the output power limit shall not be reduced.

VHT20

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2412	209.894	23.22	30	Pass
6	2437	254.097	24.05	30	Pass
11	2462	187.932	22.74	30	Pass
12	2467	137.088	21.37	30	Pass
13	2472	59.02	17.71	30	Pass

Note: The antenna gain is 4.83 dBi < 6 dBi, so the output power limit shall not be reduced.

VHT40

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
3	2422	117.49	20.70	30	Pass
6	2437	209.411	23.21	30	Pass
9	2452	132.739	21.23	30	Pass
10	2457	128.529	21.09	30	Pass
11	2462	123.027	20.90	30	Pass

Note: The antenna gain is 4.83 dBi < 6 dBi, so the output power limit shall not be reduced.

For Average Power

802.11b

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	60.256	17.80
6	2437	66.374	18.22
11	2462	67.298	18.28
12	2467	42.658	16.30
13	2472	18.621	12.70

802.11g

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	48.641	16.87
6	2437	66.527	18.23
11	2462	38.905	15.90
12	2467	26.424	14.22
13	2472	11.695	10.68

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	33.497	15.25
6	2437	64.714	18.11
11	2462	26.062	14.16
12	2467	20.091	13.03
13	2472	8.73	9.41

802.11n (HT40)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
3	2422	15.453	11.89
6	2437	35.975	15.56
9	2452	20.464	13.11
10	2457	19.454	12.89
11	2462	16.218	12.10

VHT20

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	34.277	15.35
6	2437	68.234	18.34
11	2462	26.607	14.25
12	2467	20.797	13.18
13	2472	8.974	9.53

VHT40

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
3	2422	16.106	12.07
6	2437	36.728	15.65
9	2452	21.038	13.23
10	2457	19.953	13.00
11	2462	16.672	12.22

7.2 Power Spectral Density

Input Power:	56 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Chris Lin
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802.11b

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-5.17	8	Pass
6	2437	-5.89	8	Pass
11	2462	-5.20	8	Pass
12	2467	-7.34	8	Pass
13	2472	-11.89	8	Pass

Note: The antenna gain is 4.83 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-8.12	8	Pass
6	2437	-6.40	8	Pass
11	2462	-8.90	8	Pass
12	2467	-10.51	8	Pass
13	2472	-13.97	8	Pass

Note: The antenna gain is 4.83 dBi < 6 dBi, so the power density limit shall not be reduced.

VHT20

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-10.26	8	Pass
6	2437	-6.74	8	Pass
11	2462	-11.06	8	Pass
12	2467	-12.06	8	Pass
13	2472	-15.93	8	Pass

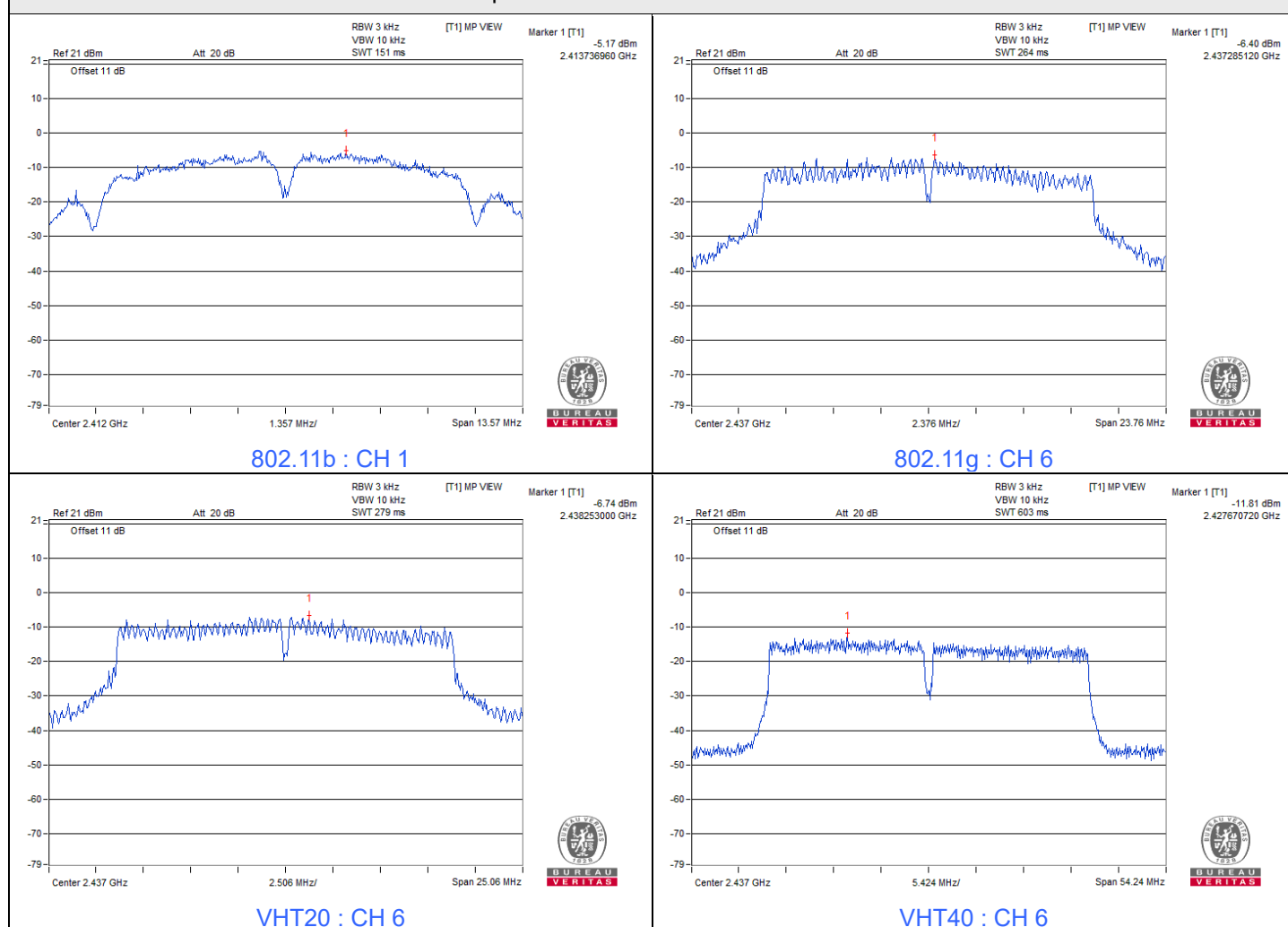
Note: The antenna gain is 4.83 dBi < 6 dBi, so the power density limit shall not be reduced.

VHT40

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
3	2422	-16.66	8	Pass
6	2437	-11.81	8	Pass
9	2452	-15.17	8	Pass
10	2457	-15.83	8	Pass
11	2462	-16.48	8	Pass

Note: The antenna gain is 4.83 dBi < 6 dBi, so the power density limit shall not be reduced.

Spectrum Plot of Maximum Value



7.3 6 dB Bandwidth

Input Power:	56 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Chris Lin
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802.11b

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	9.05	0.5	Pass
6	2437	8.6	0.5	Pass
11	2462	9.09	0.5	Pass
12	2467	9.04	0.5	Pass
13	2472	8.58	0.5	Pass

802.11g

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	15.8	0.5	Pass
6	2437	15.84	0.5	Pass
11	2462	16.07	0.5	Pass
12	2467	16.13	0.5	Pass
13	2472	16.09	0.5	Pass

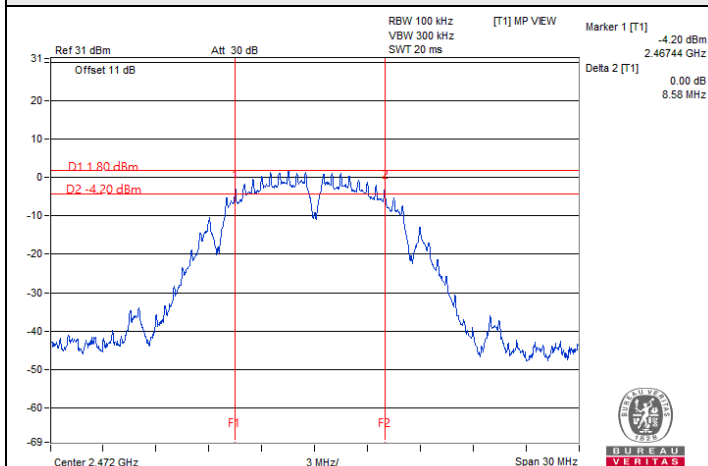
VHT20

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	17.33	0.5	Pass
6	2437	16.71	0.5	Pass
11	2462	17.22	0.5	Pass
12	2467	16.97	0.5	Pass
13	2472	16.44	0.5	Pass

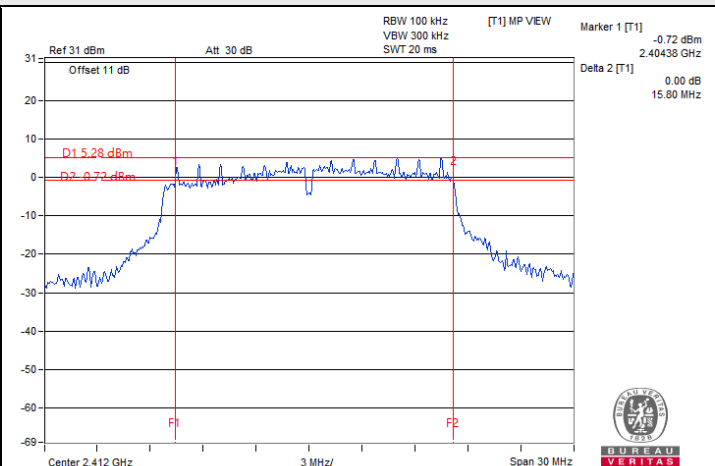
VHT40

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
3	2422	35.38	0.5	Pass
6	2437	36.16	0.5	Pass
9	2452	36.52	0.5	Pass
10	2457	36.12	0.5	Pass
11	2462	35.72	0.5	Pass

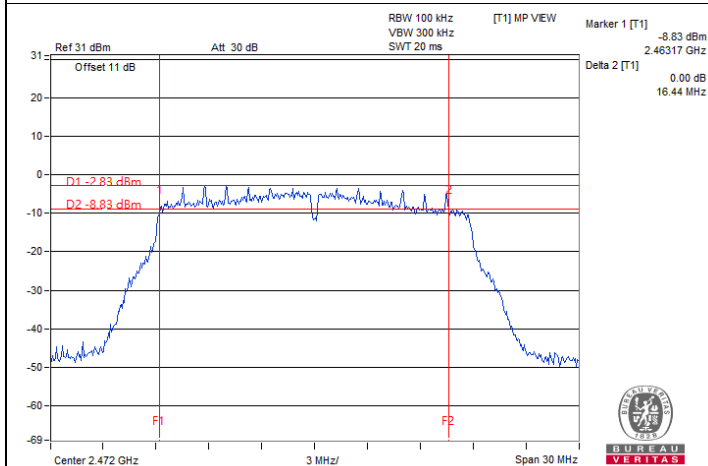
Spectrum Plot of Minimum Value



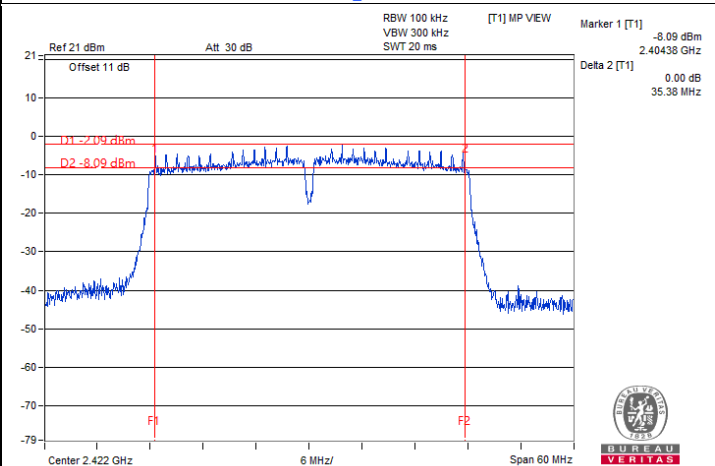
802.11b : CH 13



802.11g : CH 1



VHT20 : CH 13

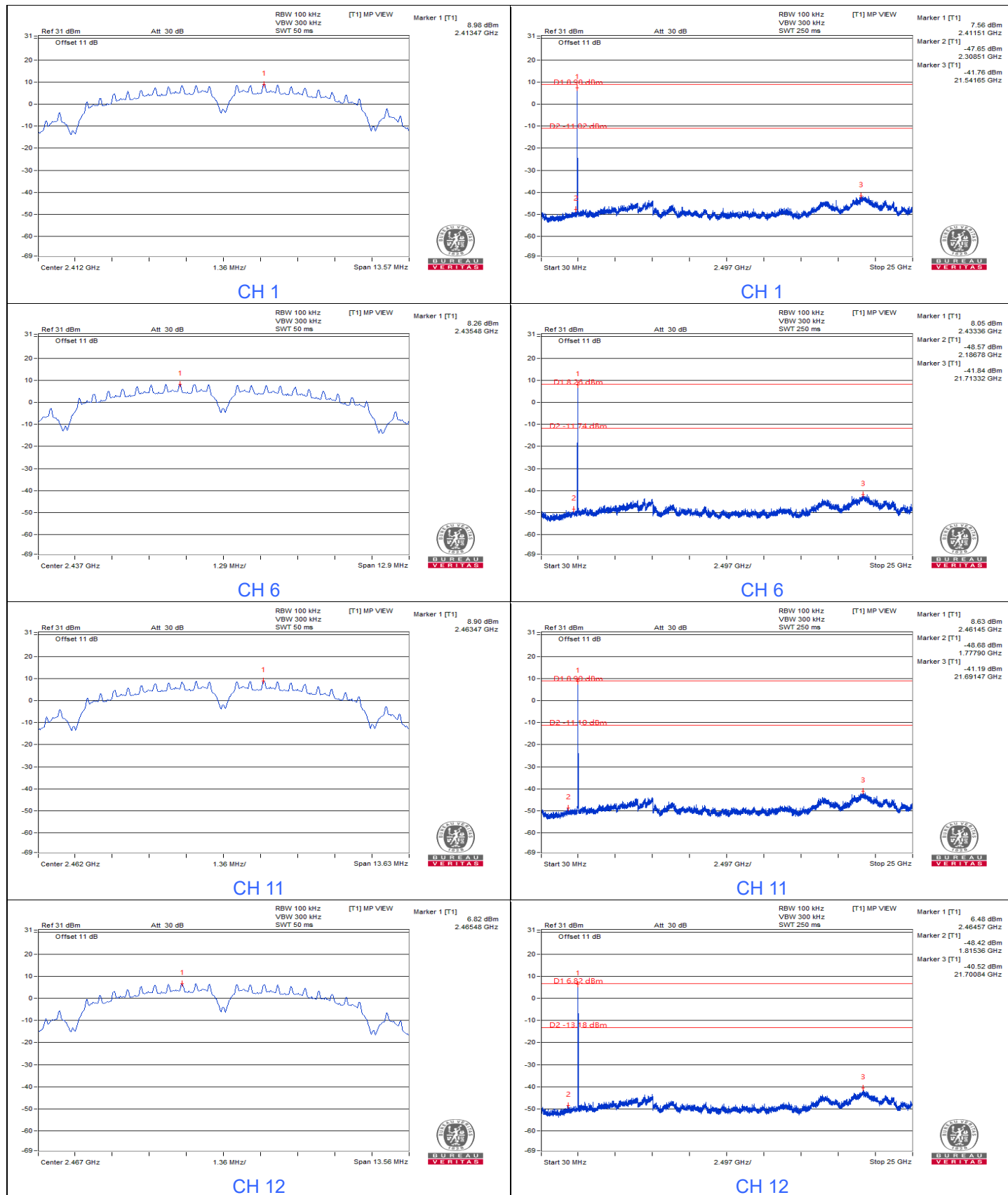


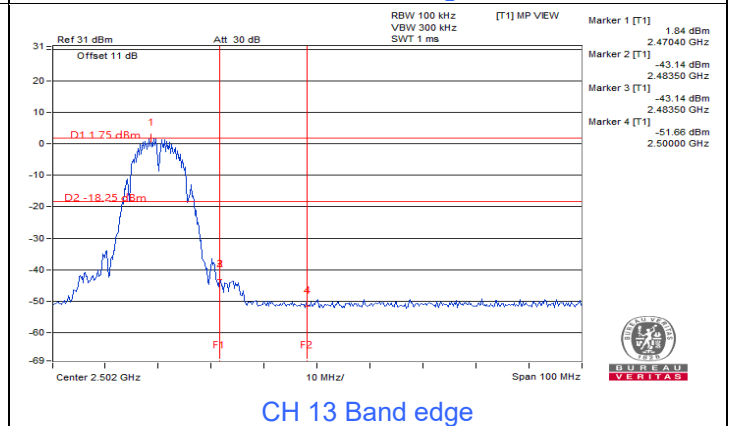
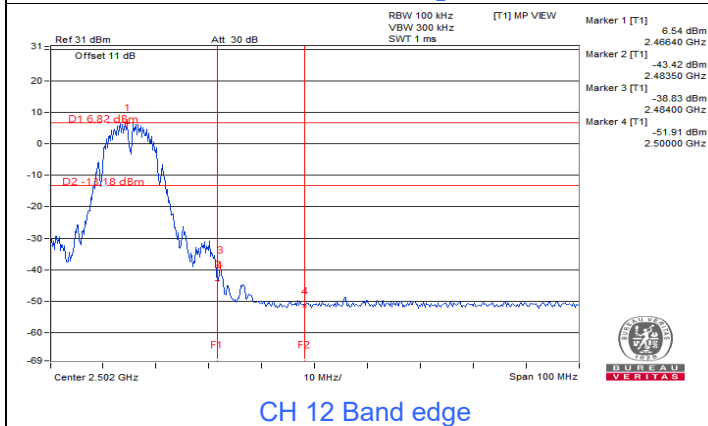
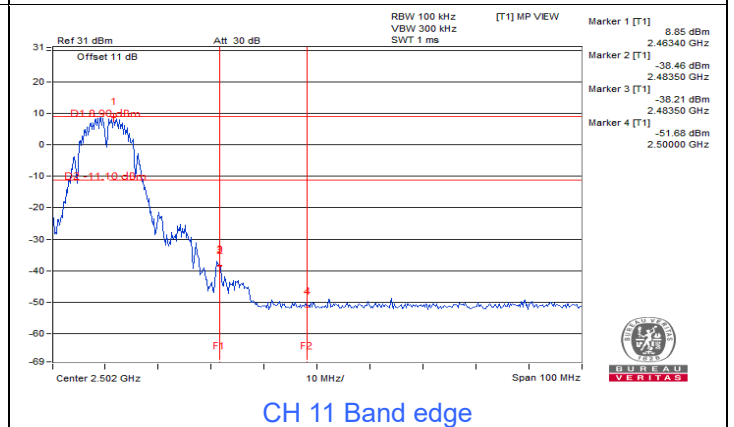
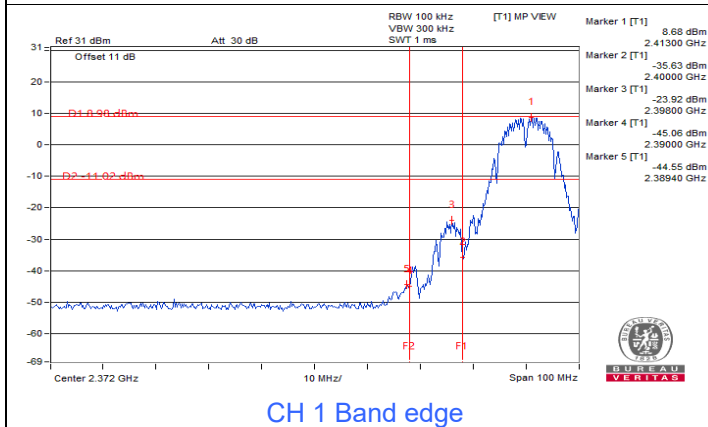
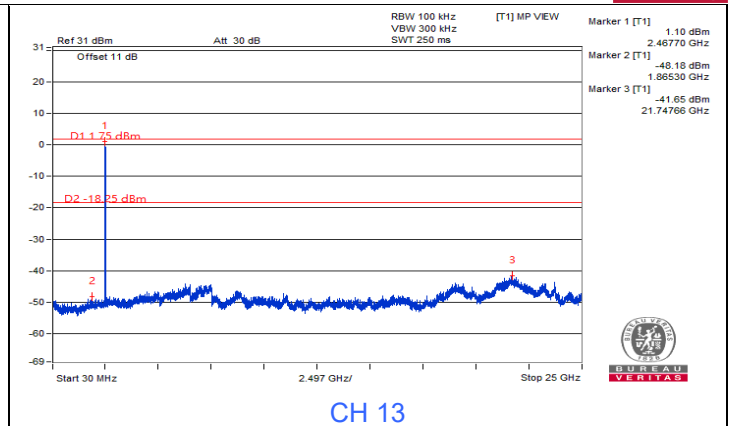
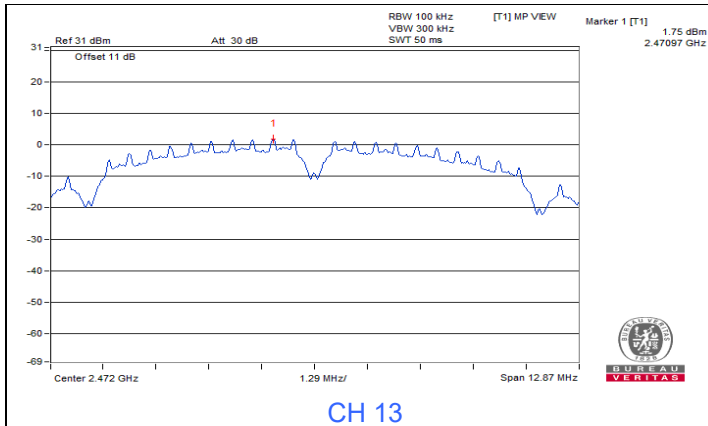
VHT40 : CH 3

7.4 Conducted Out of Band Emissions

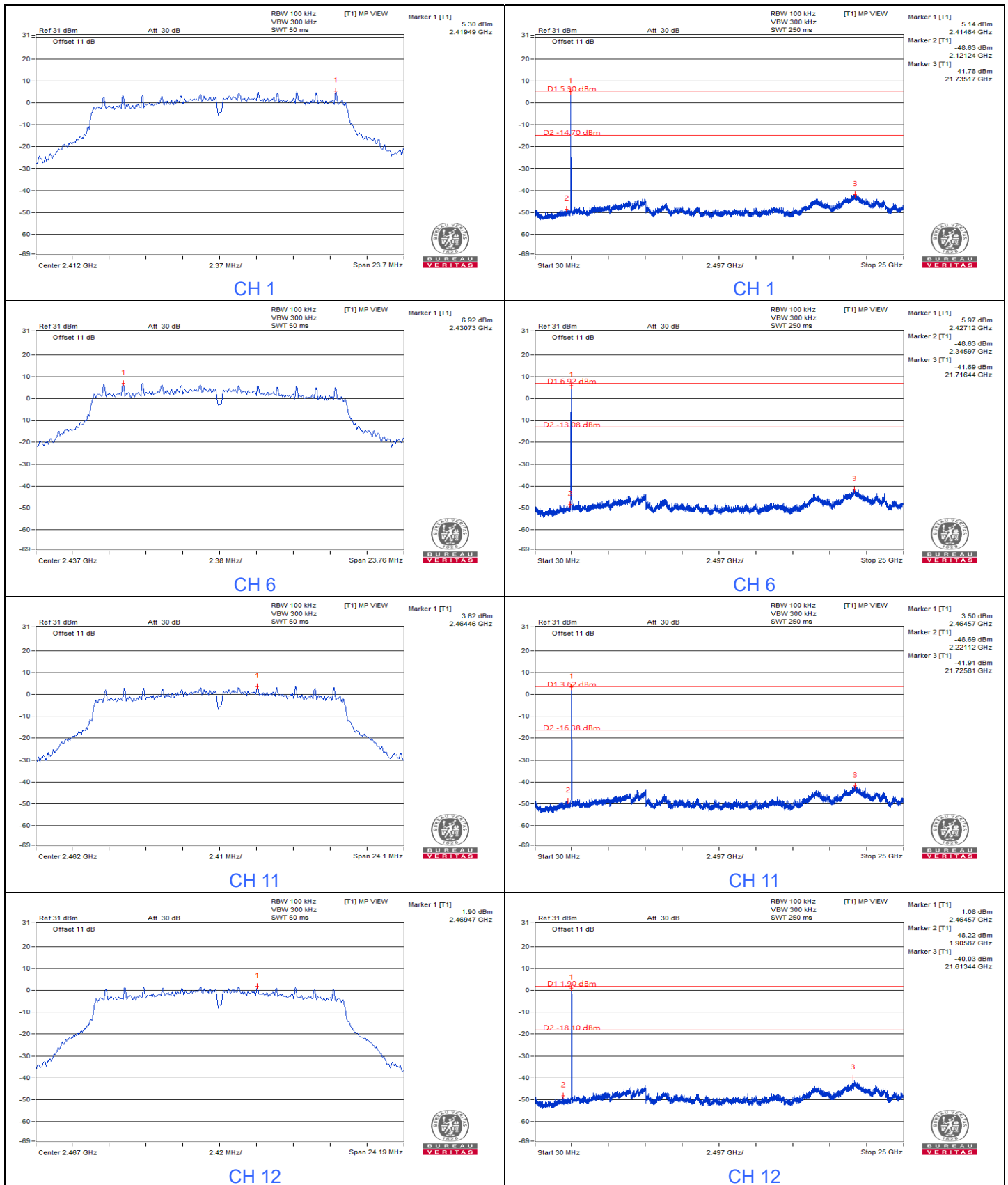
Input Power:	56 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Chris Lin
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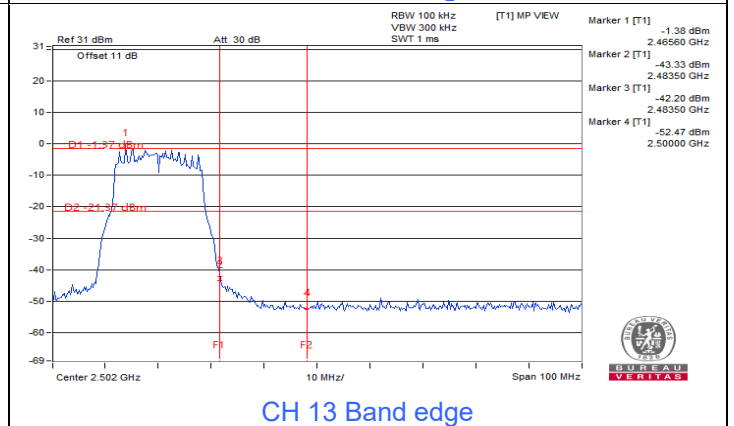
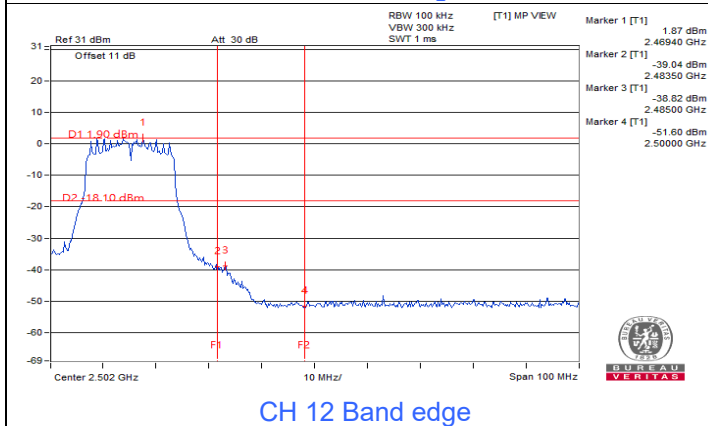
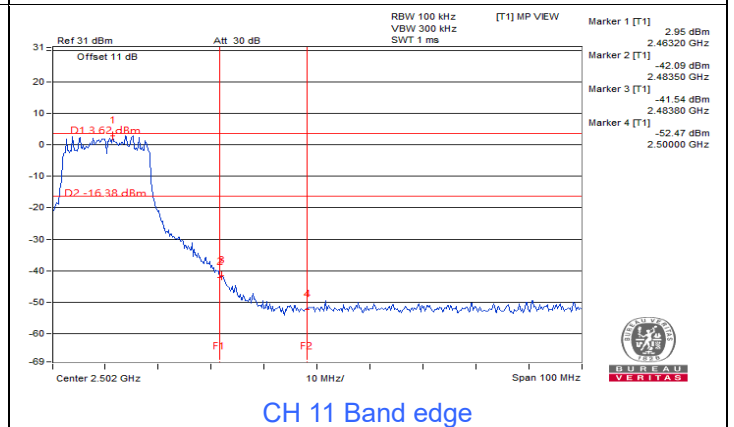
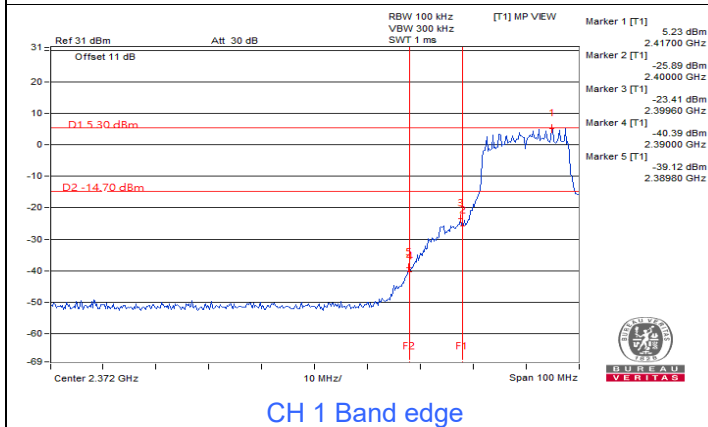
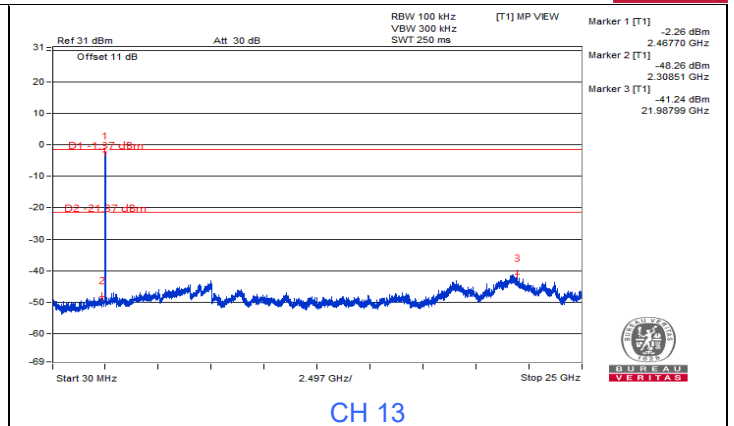
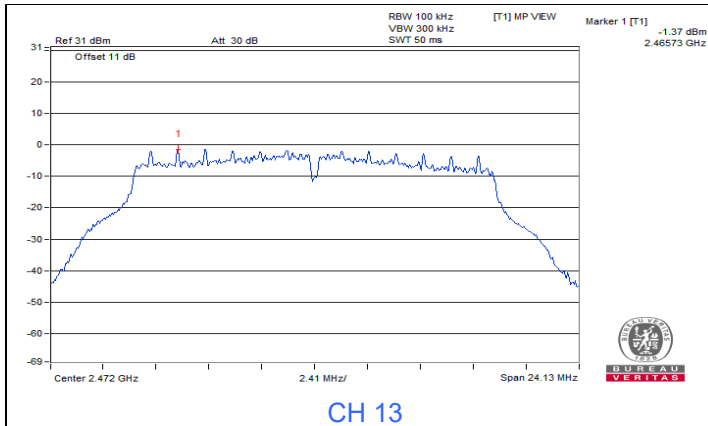
802.11b



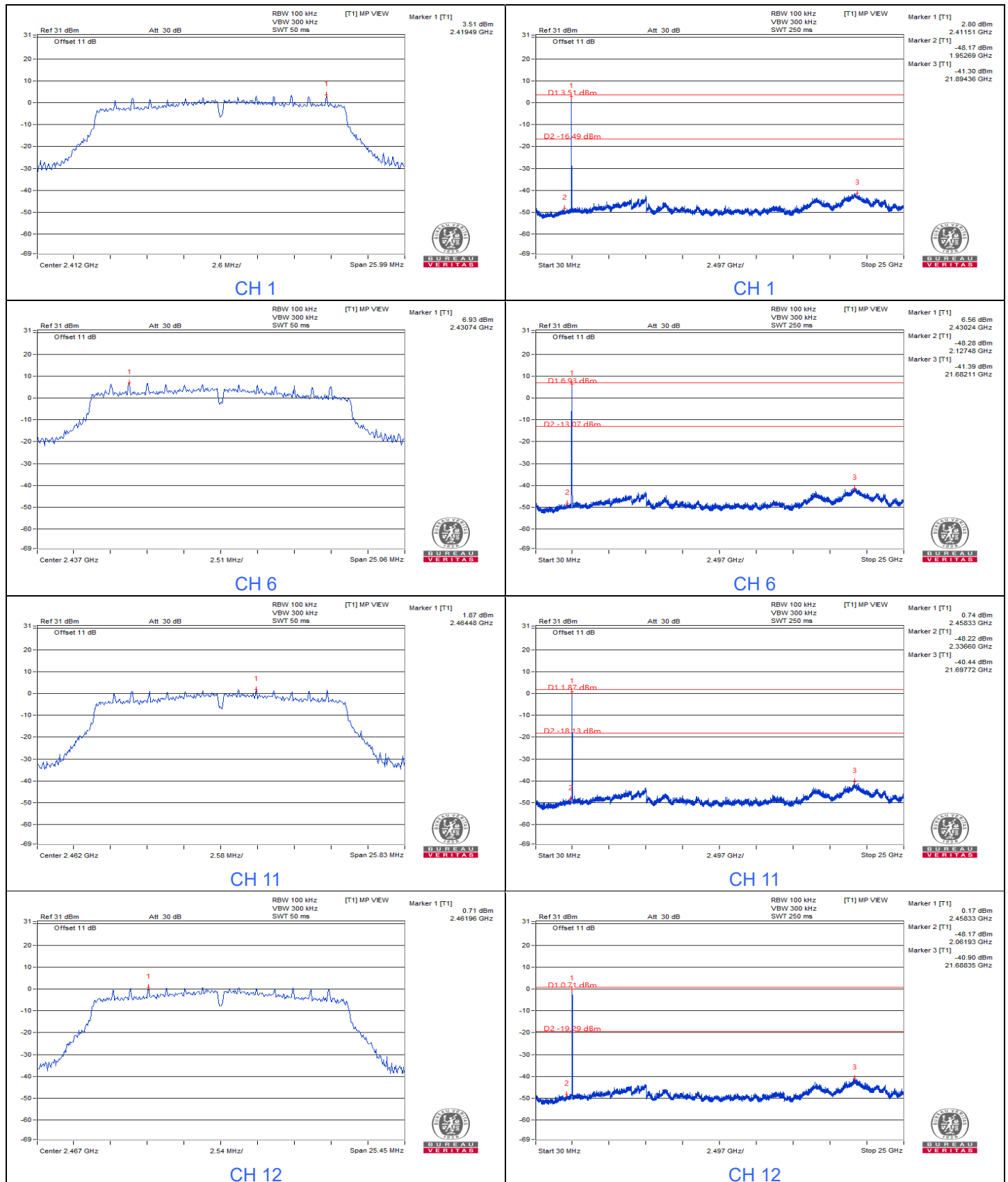


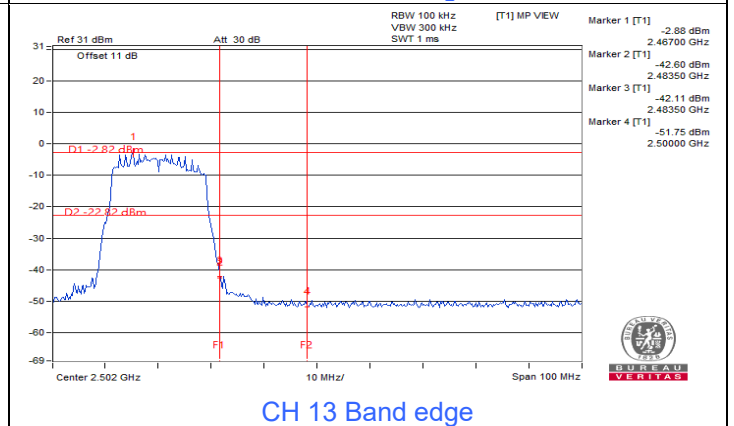
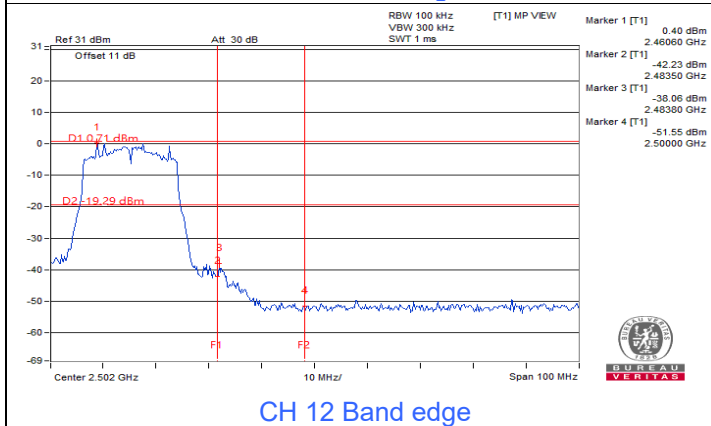
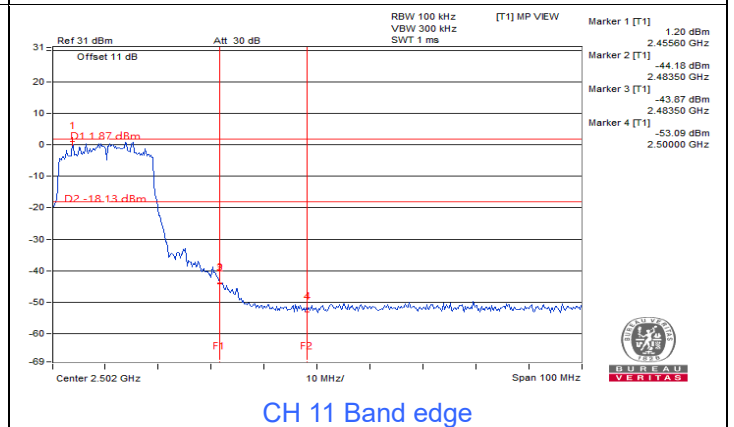
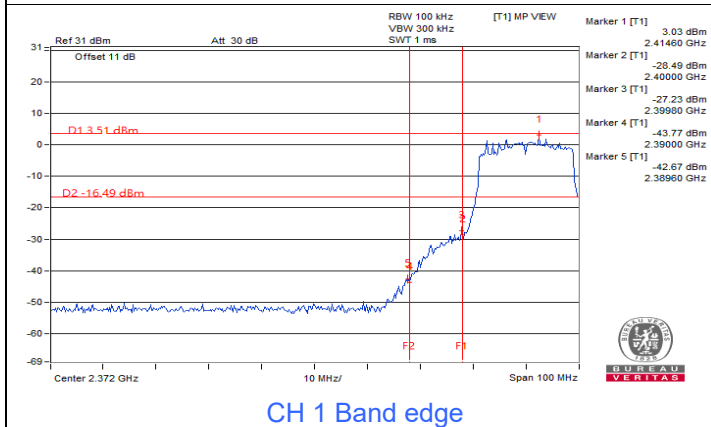
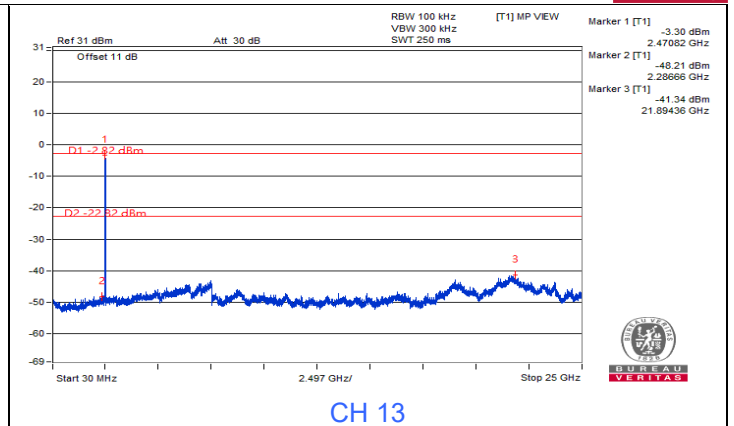
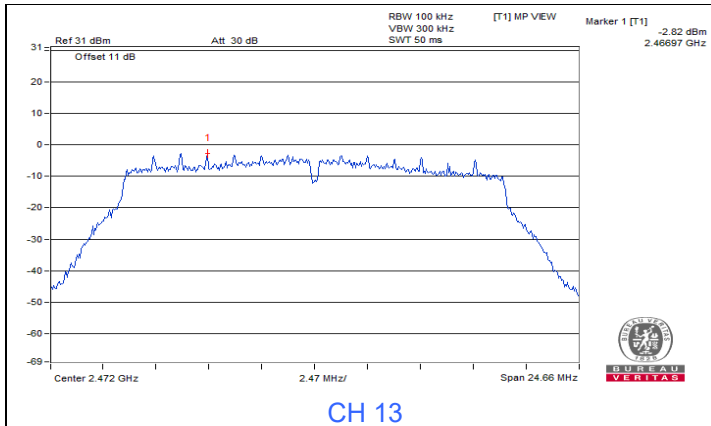
802.11g



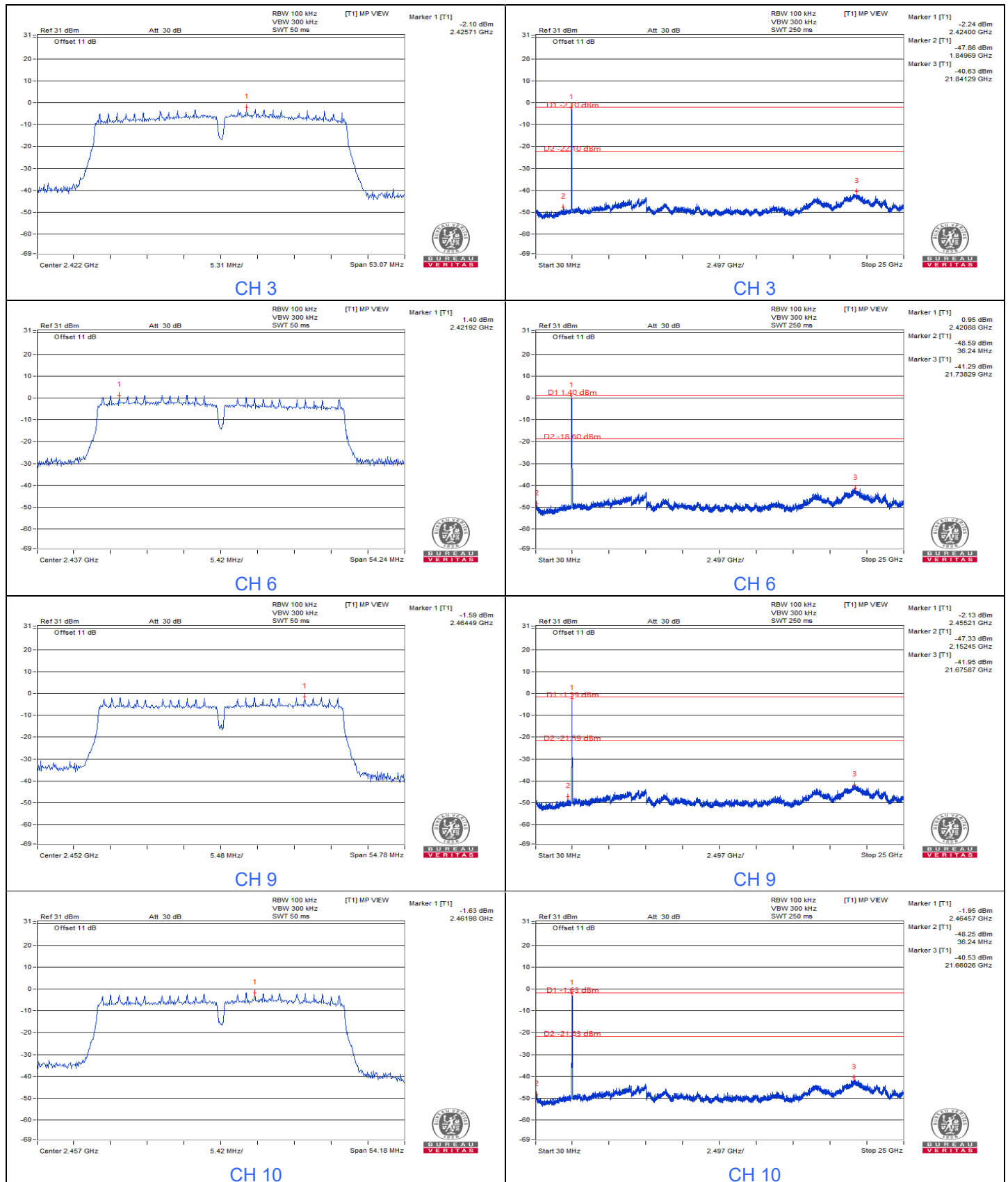


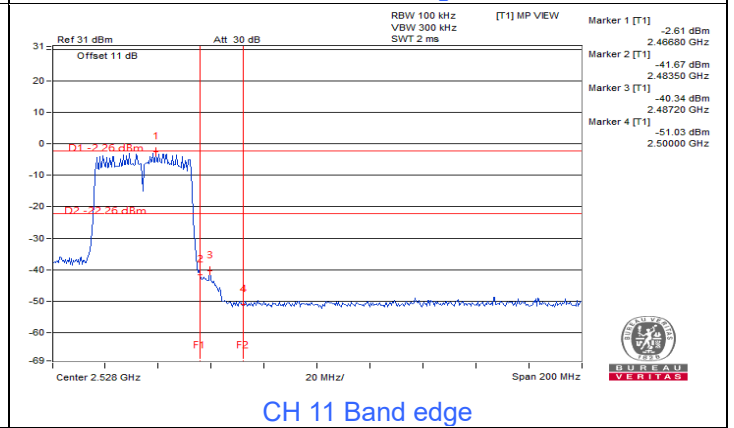
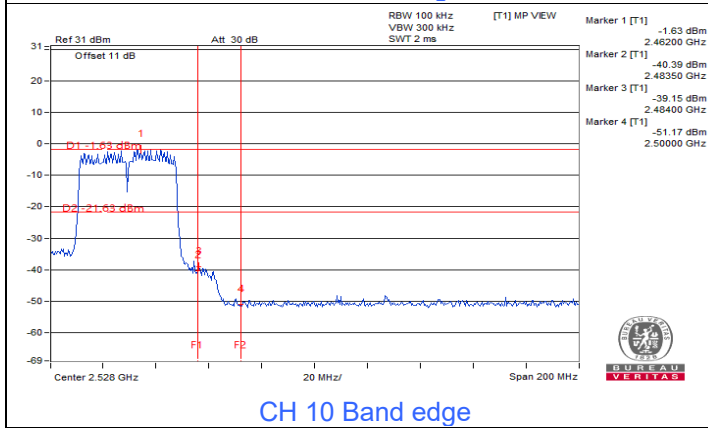
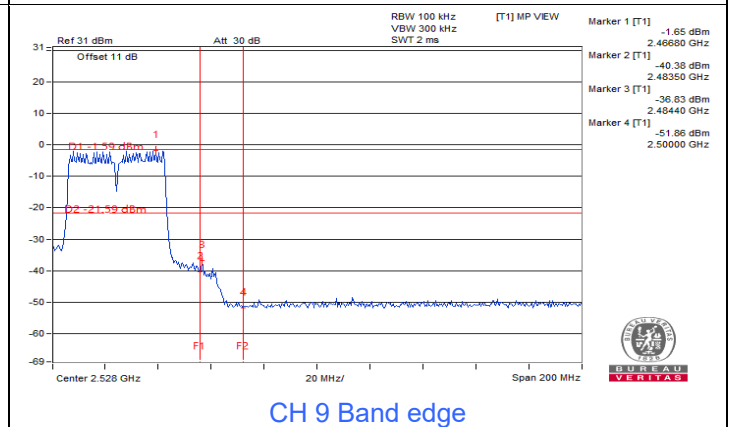
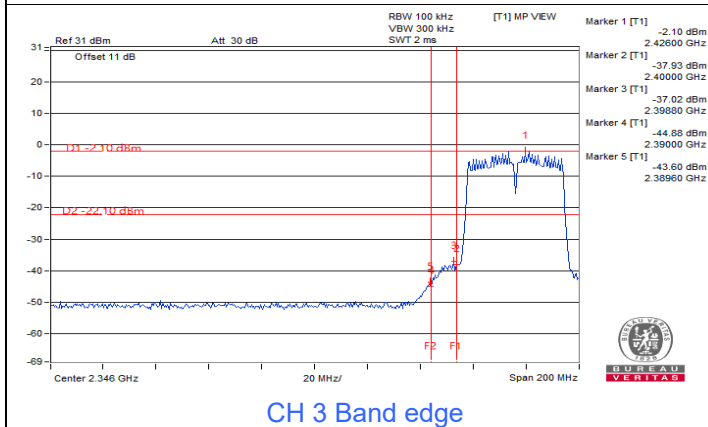
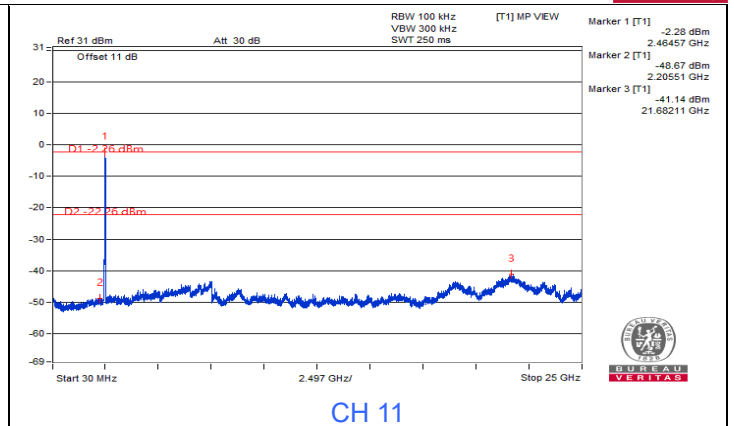
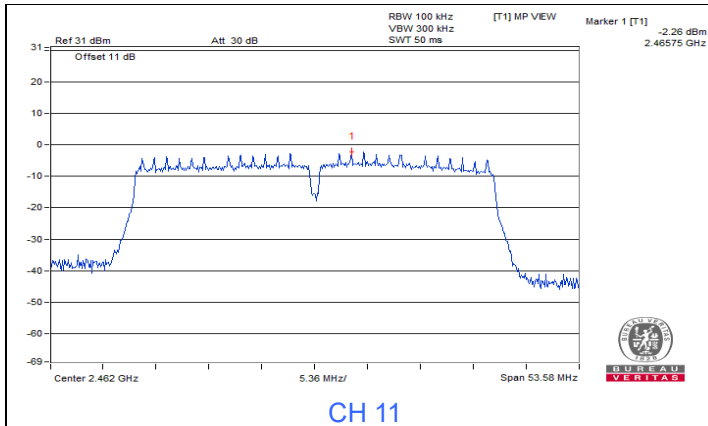
VHT20





VHT40





7.5 AC Power Conducted Emissions

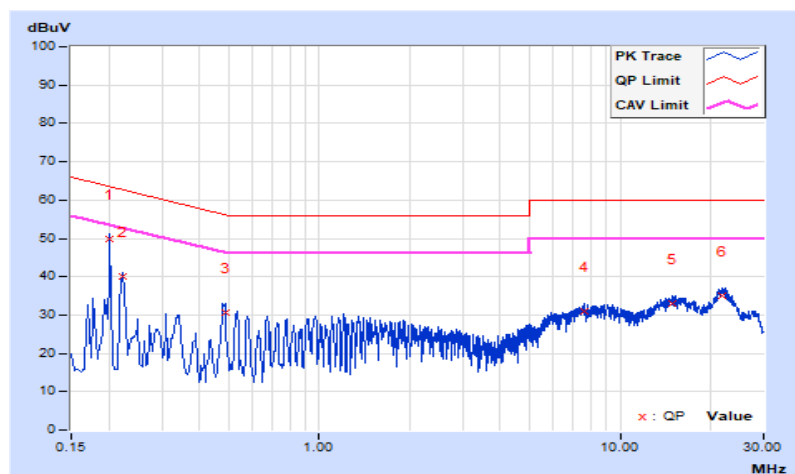
Mode A

RF Mode	VHT20	Channel	CH 6 : 2437 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	0.20200	9.66	40.30	23.97	49.96	33.63	63.53	53.53	-13.57	-19.90
2	0.22200	9.66	30.27	14.12	39.93	23.78	62.74	52.74	-22.81	-28.96
3	0.48600	9.70	20.90	16.57	30.60	26.27	56.24	46.24	-25.64	-19.97
4	7.64600	9.83	21.01	11.87	30.84	21.70	60.00	50.00	-29.16	-28.30
5	14.87400	9.93	23.18	12.22	33.11	22.15	60.00	50.00	-26.89	-27.85
6	21.93400	10.07	25.10	15.29	35.17	25.36	60.00	50.00	-24.83	-24.64

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

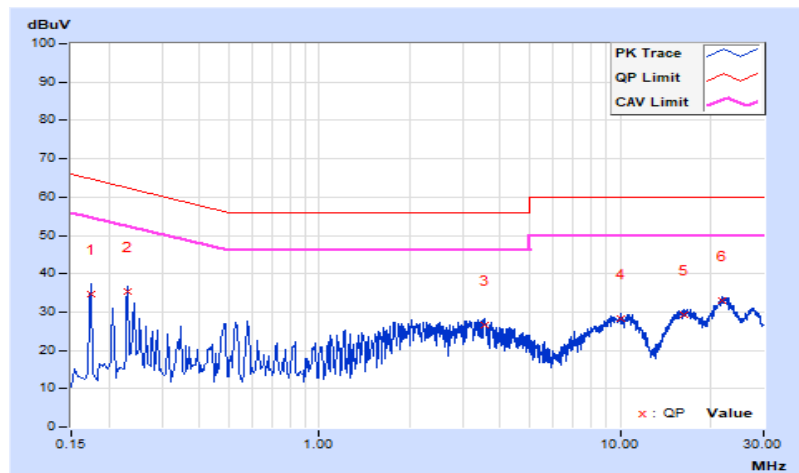


RF Mode	VHT20	Channel	CH 6 : 2437 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75 % RH
Tested By	Greg Lin		

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	0.17400	9.64	25.01	12.32	34.65	21.96	64.77	54.77	-30.12	-32.81
2	0.23000	9.66	25.70	12.47	35.36	22.13	62.45	52.45	-27.09	-30.32
3	3.55800	9.78	16.75	6.33	26.53	16.11	56.00	46.00	-29.47	-29.89
4	10.10600	9.94	18.24	6.78	28.18	16.72	60.00	50.00	-31.82	-33.28
5	16.20200	10.09	19.17	8.13	29.26	18.22	60.00	50.00	-30.74	-31.78
6	21.94600	10.24	22.77	11.97	33.01	22.21	60.00	50.00	-26.99	-27.79

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



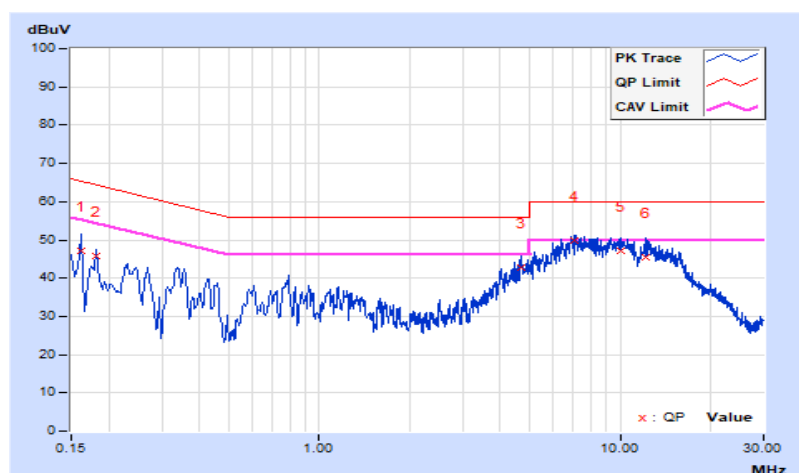
Mode B

RF Mode	VHT20	Channel	CH 6 : 2437 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	0.16200	9.67	37.30	26.64	46.97	36.31	65.36	55.36	-18.39	-19.05
2	0.18200	9.66	36.09	29.39	45.75	39.05	64.39	54.39	-18.64	-15.34
3	4.67400	9.79	33.10	23.05	42.89	32.84	56.00	46.00	-13.11	-13.16
4	7.05800	9.83	40.03	31.97	49.86	41.80	60.00	50.00	-10.14	-8.20
5	10.09400	9.87	37.35	30.91	47.22	40.78	60.00	50.00	-12.78	-9.22
6	12.20200	9.90	35.55	28.76	45.45	38.66	60.00	50.00	-14.55	-11.34

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

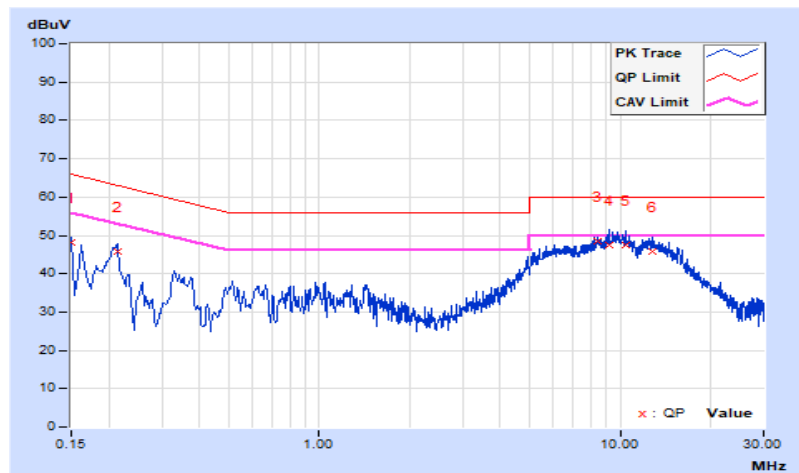


RF Mode	VHT20	Channel	CH 6 : 2437 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75 % RH
Tested By	Greg Lin		

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	9.64	38.40	24.52	48.04	34.16	66.00	56.00	-17.96	-21.84
2	0.21350	9.65	36.26	22.52	45.91	32.17	63.07	53.07	-17.16	-20.90
3	8.37400	9.90	38.48	29.17	48.38	39.07	60.00	50.00	-11.62	-10.93
4	9.15000	9.92	37.50	29.65	47.42	39.57	60.00	50.00	-12.58	-10.43
5	10.41800	9.95	37.65	29.12	47.60	39.07	60.00	50.00	-12.40	-10.93
6	12.82200	10.00	35.79	27.57	45.79	37.57	60.00	50.00	-14.21	-12.43

Remarks:

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



7.6 Unwanted Emissions below 1 GHz

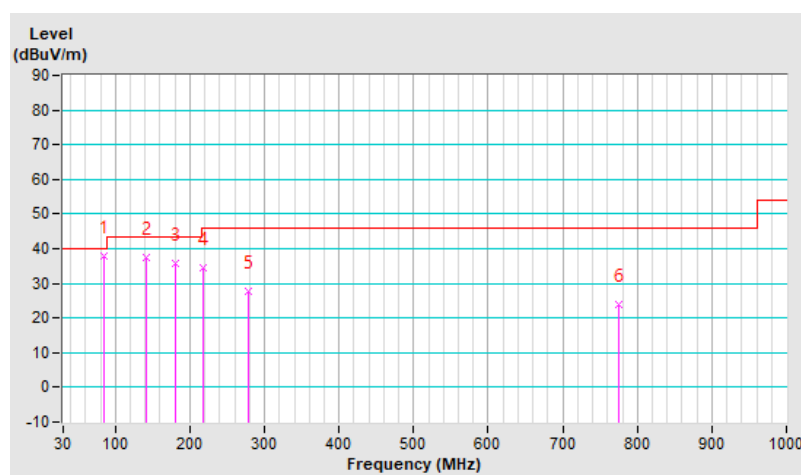
Mode A

RF Mode	VHT20	Channel	CH 6 : 2437 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Charles Hsiao		

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	85.29	37.7 QP	40.0	-2.3	1.15 H	218	44.5	-6.8
2	140.58	37.3 QP	43.5	-6.2	1.64 H	3	44.1	-6.8
3	180.35	35.9 QP	43.5	-7.6	1.15 H	180	42.7	-6.8
4	218.18	34.5 QP	46.0	-11.5	1.74 H	117	41.3	-6.8
5	278.32	27.9 QP	46.0	-18.1	1.55 H	164	34.7	-6.8
6	774.96	24.0 QP	46.0	-22.0	1.89 H	29	30.8	-6.8

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.

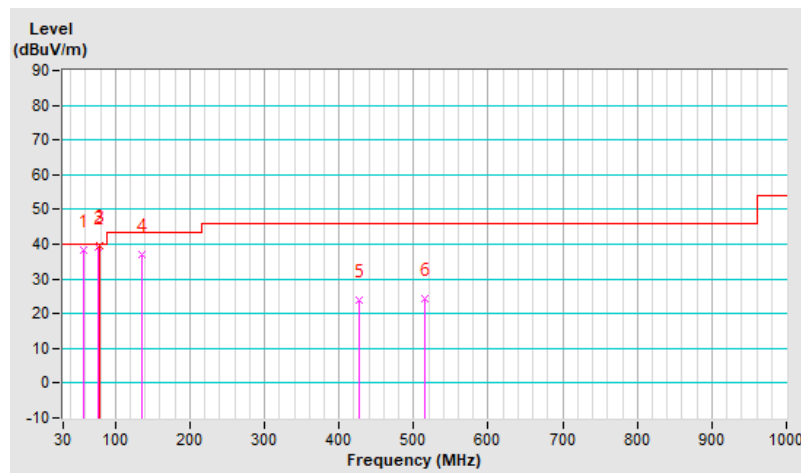


RF Mode	VHT20	Channel	CH 6 : 2437 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Charles Hsiao		

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	57.16	38.1 QP	40.0	-1.9	1.57 V	77	44.9	-6.8
2	77.53	39.0 QP	40.0	-1.0	1.01 V	314	45.8	-6.8
3	79.46	39.5 QP	40.0	-0.5	1.00 V	315	46.3	-6.8
4	134.76	37.0 QP	43.5	-6.5	1.57 V	277	43.8	-6.8
5	426.73	24.0 QP	46.0	-22.0	1.34 V	29	30.8	-6.8
6	515.00	24.5 QP	46.0	-21.5	1.99 V	247	31.3	-6.8

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.



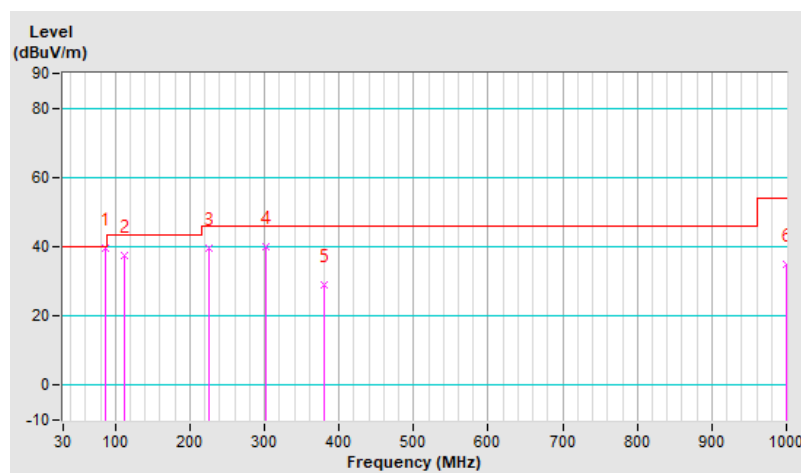
Mode B

RF Mode	VHT20	Channel	CH 6 : 2437 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Charles Hsiao		

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	86.74	39.6 QP	40.0	-0.4	2.00 H	303	46.4	-6.8
2	111.48	37.5 QP	43.5	-6.0	1.11 H	154	44.3	-6.8
3	225.94	39.4 QP	46.0	-6.6	1.88 H	54	46.2	-6.8
4	302.57	40.0 QP	46.0	-6.0	1.64 H	9	46.8	-6.8
5	380.17	29.0 QP	46.0	-17.0	1.05 H	201	35.8	-6.8
6	1000.00	34.9 QP	54.0	-19.1	1.00 H	0	41.7	-6.8

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.

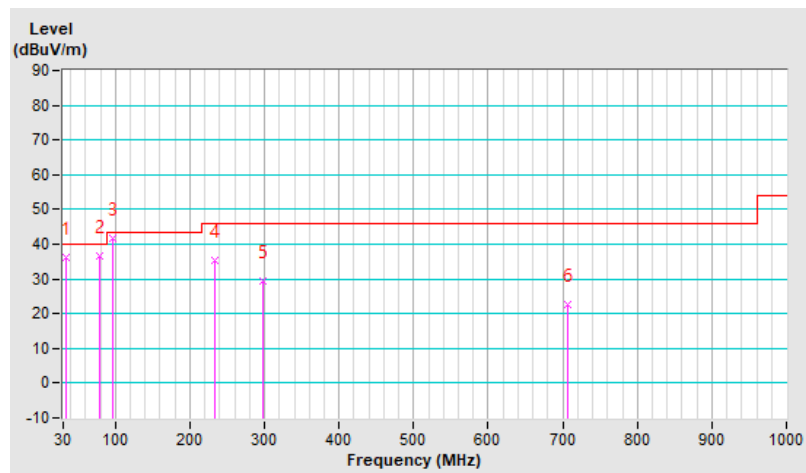


RF Mode	VHT20	Channel	CH 6 : 2437 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.88	36.2 QP	40.0	-3.8	1.15 V	54	43.0	-6.8
2	79.47	36.4 QP	40.0	-3.6	1.97 V	6	43.2	-6.8
3	96.93	41.7 QP	43.5	-1.8	1.16 V	65	48.5	-6.8
4	232.73	35.4 QP	46.0	-10.6	1.97 V	83	42.2	-6.8
5	297.72	29.5 QP	46.0	-16.5	1.15 V	316	36.3	-6.8
6	706.09	22.6 QP	46.0	-23.4	1.08 V	332	29.4	-6.8

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	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Charles Hsiao		

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	58.2 PK	74.0	-15.8	1.50 H	151	26.0	32.2
2	2390.00	52.1 AV	54.0	-1.9	1.50 H	151	19.9	32.2
3	*2412.00	105.8 PK			1.50 H	151	73.6	32.2
4	*2412.00	104.7 AV			1.50 H	151	72.5	32.2
5	4824.00	46.4 PK	74.0	-27.6	1.95 H	65	43.5	2.9
6	4824.00	35.1 AV	54.0	-18.9	1.95 H	65	32.2	2.9
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	57.0 PK	74.0	-17.0	3.28 V	184	24.8	32.2
2	2390.00	50.0 AV	54.0	-4.0	3.28 V	184	17.8	32.2
3	*2412.00	102.7 PK			3.28 V	184	70.5	32.2
4	*2412.00	101.0 AV			3.28 V	184	68.8	32.2
5	4824.00	45.2 PK	74.0	-28.8	1.85 V	64	42.3	2.9
6	4824.00	35.0 AV	54.0	-19.0	1.85 V	64	32.1	2.9

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 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	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Charles Hsiao		

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	106.2 PK			1.50 H	151	74.0	32.2
2	*2437.00	105.1 AV			1.50 H	151	72.9	32.2
3	4874.00	47.5 PK	74.0	-26.5	1.15 H	248	44.5	3.0
4	4874.00	36.3 AV	54.0	-17.7	1.15 H	248	33.3	3.0
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	*2437.00	103.2 PK			3.28 V	184	71.0	32.2
2	*2437.00	102.4 AV			3.28 V	184	70.2	32.2
3	4874.00	46.4 PK	74.0	-27.6	1.84 V	5	43.4	3.0
4	4874.00	35.1 AV	54.0	-18.9	1.84 V	5	32.1	3.0

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.

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	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	105.7 PK			1.50 H	151	73.5	32.2
2	*2462.00	103.9 AV			1.50 H	151	71.7	32.2
3	2483.50	58.8 PK	74.0	-15.2	1.50 H	151	26.5	32.3
4	2483.50	53.4 AV	54.0	-0.6	1.50 H	151	21.1	32.3
5	4924.00	47.2 PK	74.0	-26.8	1.05 H	215	44.1	3.1
6	4924.00	36.0 AV	54.0	-18.0	1.05 H	215	32.9	3.1
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	*2462.00	103.6 PK			3.28 V	184	71.4	32.2
2	*2462.00	101.7 AV			3.28 V	184	69.5	32.2
3	2483.50	57.0 PK	74.0	-17.0	3.28 V	184	24.7	32.3
4	2483.50	50.7 AV	54.0	-3.3	3.28 V	184	18.4	32.3
5	4924.00	46.1 PK	74.0	-27.9	1.65 V	322	43.0	3.1
6	4924.00	35.9 AV	54.0	-18.1	1.65 V	322	32.8	3.1

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	802.11b	Channel	CH 12 : 2467 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Charles Hsiao		

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	*2467.00	104.0 PK			1.50 H	151	71.8	32.2
2	*2467.00	102.8 AV			1.50 H	151	70.6	32.2
3	2483.50	61.1 PK	74.0	-12.9	1.50 H	151	28.8	32.3
4	2483.50	52.9 AV	54.0	-1.1	1.50 H	151	20.6	32.3
5	4934.00	47.0 PK	74.0	-27.0	1.54 H	155	43.9	3.1
6	4934.00	36.6 AV	54.0	-17.4	1.54 H	155	33.5	3.1
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	*2467.00	102.1 PK			3.28 V	184	69.9	32.2
2	*2467.00	100.3 AV			3.28 V	184	68.1	32.2
3	2483.50	61.0 PK	74.0	-13.0	3.28 V	184	28.7	32.3
4	2483.50	52.0 AV	54.0	-2.0	3.28 V	184	19.7	32.3
5	4934.00	46.1 PK	74.0	-27.9	1.95 V	6	43.0	3.1
6	4934.00	35.9 AV	54.0	-18.1	1.95 V	6	32.8	3.1

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	802.11b	Channel	CH 13 : 2472 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Charles Hsiao		

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	*2472.00	99.8 PK			1.50 H	151	67.6	32.2
2	*2472.00	97.4 AV			1.50 H	151	65.2	32.2
3	2483.50	61.5 PK	74.0	-12.5	1.50 H	151	29.2	32.3
4	2483.50	53.3 AV	54.0	-0.7	1.50 H	151	21.0	32.3
5	4944.00	47.2 PK	74.0	-26.8	1.15 H	54	44.1	3.1
6	4944.00	36.1 AV	54.0	-17.9	1.15 H	54	33.0	3.1
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	*2472.00	97.6 PK			3.28 V	184	65.4	32.2
2	*2472.00	95.8 AV			3.28 V	184	63.6	32.2
3	2483.50	59.7 PK	74.0	-14.3	3.28 V	184	27.4	32.3
4	2483.50	52.2 AV	54.0	-1.8	3.28 V	184	19.9	32.3
5	4944.00	47.0 PK	74.0	-27.0	1.57 V	48	43.9	3.1
6	4944.00	35.7 AV	54.0	-18.3	1.57 V	48	32.6	3.1

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	802.11g	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 °C, 65 % RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	67.0 PK	74.0	-7.0	1.50 H	151	34.8	32.2
2	2390.00	53.5 AV	54.0	-0.5	1.50 H	151	21.3	32.2
3	*2412.00	106.7 PK			1.50 H	151	74.5	32.2
4	*2412.00	99.4 AV			1.50 H	151	67.2	32.2
5	4824.00	46.2 PK	74.0	-27.8	1.05 H	222	43.3	2.9
6	4824.00	35.7 AV	54.0	-18.3	1.05 H	222	32.8	2.9
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	65.5 PK	74.0	-8.5	3.28 V	184	33.3	32.2
2	2390.00	52.5 AV	54.0	-1.5	3.28 V	184	20.3	32.2
3	*2412.00	104.5 PK			3.28 V	184	72.3	32.2
4	*2412.00	97.1 AV			3.28 V	184	64.9	32.2
5	4824.00	46.0 PK	74.0	-28.0	1.65 V	228	43.1	2.9
6	4824.00	35.4 AV	54.0	-18.6	1.65 V	228	32.5	2.9

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 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 °C, 65 % RH
Tested By	Charles Hsiao		

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	108.8 PK			1.50 H	151	76.6	32.2
2	*2437.00	101.6 AV			1.50 H	151	69.4	32.2
3	4874.00	47.3 PK	74.0	-26.7	1.56 H	64	44.3	3.0
4	4874.00	36.3 AV	54.0	-17.7	1.56 H	64	33.3	3.0
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	*2437.00	105.9 PK			3.28 V	184	73.7	32.2
2	*2437.00	98.4 AV			3.28 V	184	66.2	32.2
3	4874.00	46.4 PK	74.0	-27.6	1.58 V	111	43.4	3.0
4	4874.00	36.0 AV	54.0	-18.0	1.58 V	111	33.0	3.0

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.

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 °C, 65 % RH
Tested By	Charles Hsiao		

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	106.4 PK			1.50 H	151	74.2	32.2
2	*2462.00	99.6 AV			1.50 H	151	67.4	32.2
3	2483.50	67.3 PK	74.0	-6.7	1.50 H	151	35.0	32.3
4	2483.50	53.0 AV	54.0	-1.0	1.50 H	151	20.7	32.3
5	4924.00	46.6 PK	74.0	-27.4	1.06 H	321	43.5	3.1
6	4924.00	35.9 AV	54.0	-18.1	1.06 H	321	32.8	3.1
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	*2462.00	104.2 PK			3.28 V	184	72.0	32.2
2	*2462.00	97.2 AV			3.28 V	184	65.0	32.2
3	2483.50	66.9 PK	74.0	-7.1	3.28 V	184	34.6	32.3
4	2483.50	51.3 AV	54.0	-2.7	3.28 V	184	19.0	32.3
5	4924.00	45.8 PK	74.0	-28.2	1.05 V	200	42.7	3.1
6	4924.00	35.1 AV	54.0	-18.9	1.05 V	200	32.0	3.1

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	802.11g	Channel	CH 12 : 2467 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Charles Hsiao		

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	*2467.00	105.3 PK			1.50 H	151	73.1	32.2
2	*2467.00	97.7 AV			1.50 H	151	65.5	32.2
3	2483.50	67.7 PK	74.0	-6.3	1.50 H	151	35.4	32.3
4	2483.50	53.4 AV	54.0	-0.6	1.50 H	151	21.1	32.3
5	4934.00	46.1 PK	74.0	-27.9	1.59 H	206	43.0	3.1
6	4934.00	35.6 AV	54.0	-18.4	1.59 H	206	32.5	3.1
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	*2467.00	102.2 PK			3.28 V	184	70.0	32.2
2	*2467.00	95.3 AV			3.28 V	184	63.1	32.2
3	2483.50	65.4 PK	74.0	-8.6	3.28 V	184	33.1	32.3
4	2483.50	52.0 AV	54.0	-2.0	3.28 V	184	19.7	32.3
5	4934.00	45.5 PK	74.0	-28.5	1.57 V	311	42.4	3.1
6	4934.00	34.9 AV	54.0	-19.1	1.57 V	311	31.8	3.1

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	802.11g	Channel	CH 13 : 2472 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Charles Hsiao		

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	*2472.00	101.0 PK			1.50 H	151	68.8	32.2
2	*2472.00	93.5 AV			1.50 H	151	61.3	32.2
3	2483.50	67.3 PK	74.0	-6.7	1.50 H	151	35.0	32.3
4	2483.50	53.5 AV	54.0	-0.5	1.50 H	151	21.2	32.3
5	4944.00	46.4 PK	74.0	-27.6	1.05 H	3	43.3	3.1
6	4944.00	36.2 AV	54.0	-17.8	1.05 H	3	33.1	3.1
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	*2472.00	98.6 PK			3.28 V	184	66.4	32.2
2	*2472.00	91.4 AV			3.28 V	184	59.2	32.2
3	2483.50	65.5 PK	74.0	-8.5	3.28 V	184	33.2	32.3
4	2483.50	51.2 AV	54.0	-2.8	3.28 V	184	18.9	32.3
5	4944.00	45.9 PK	74.0	-28.1	1.74 V	188	42.8	3.1
6	4944.00	34.7 AV	54.0	-19.3	1.74 V	188	31.6	3.1

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	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 °C, 65 % RH
Tested By	Charles Hsiao		

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	70.0 PK	74.0	-4.0	1.50 H	151	37.8	32.2
2	2390.00	53.5 AV	54.0	-0.5	1.50 H	151	21.3	32.2
3	*2412.00	107.1 PK			1.50 H	151	74.9	32.2
4	*2412.00	99.6 AV			1.50 H	151	67.4	32.2
5	4824.00	47.5 PK	74.0	-26.5	1.95 H	345	44.6	2.9
6	4824.00	35.6 AV	54.0	-18.4	1.95 H	345	32.7	2.9
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	69.6 PK	74.0	-4.4	3.28 V	184	37.4	32.2
2	2390.00	52.4 AV	54.0	-1.6	3.28 V	184	20.2	32.2
3	*2412.00	105.5 PK			3.28 V	184	73.3	32.2
4	*2412.00	97.6 AV			3.28 V	184	65.4	32.2
5	4824.00	46.6 PK	74.0	-27.4	1.54 V	11	43.7	2.9
6	4824.00	35.5 AV	54.0	-18.5	1.54 V	11	32.6	2.9

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 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 °C, 65 % RH
Tested By	Charles Hsiao		

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	111.7 PK			1.50 H	151	79.5	32.2
2	*2437.00	102.9 AV			1.50 H	151	70.7	32.2
3	4874.00	47.3 PK	74.0	-26.7	1.97 H	185	44.3	3.0
4	4874.00	35.8 AV	54.0	-18.2	1.97 H	185	32.8	3.0
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	*2437.00	108.6 PK			3.28 V	184	76.4	32.2
2	*2437.00	100.4 AV			3.28 V	184	68.2	32.2
3	4874.00	46.0 PK	74.0	-28.0	1.54 V	240	43.0	3.0
4	4874.00	35.3 AV	54.0	-18.7	1.54 V	240	32.3	3.0

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.

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 °C, 65 % RH
Tested By	Charles Hsiao		

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	107.8 PK			1.50 H	151	75.6	32.2
2	*2462.00	99.7 AV			1.50 H	151	67.5	32.2
3	2483.50	73.0 PK	74.0	-1.0	1.50 H	151	40.7	32.3
4	2483.50	53.3 AV	54.0	-0.7	1.50 H	151	21.0	32.3
5	4924.00	46.6 PK	74.0	-27.4	1.15 H	240	43.5	3.1
6	4924.00	36.1 AV	54.0	-17.9	1.15 H	240	33.0	3.1
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	*2462.00	104.5 PK			3.28 V	184	72.3	32.2
2	*2462.00	96.6 AV			3.28 V	184	64.4	32.2
3	2483.50	69.7 PK	74.0	-4.3	3.28 V	184	37.4	32.3
4	2483.50	51.4 AV	54.0	-2.6	3.28 V	184	19.1	32.3
5	4924.00	45.9 PK	74.0	-28.1	1.99 V	6	42.8	3.1
6	4924.00	35.9 AV	54.0	-18.1	1.99 V	6	32.8	3.1

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	VHT20	Channel	CH 12 : 2467 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Charles Hsiao		

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	*2467.00	106.9 PK			1.50 H	151	74.7	32.2
2	*2467.00	98.4 AV			1.50 H	151	66.2	32.2
3	2483.50	71.7 PK	74.0	-2.3	1.50 H	151	39.4	32.3
4	2483.50	53.5 AV	54.0	-0.5	1.50 H	151	21.2	32.3
5	4934.00	46.6 PK	74.0	-27.4	1.55 H	15	43.5	3.1
6	4934.00	35.8 AV	54.0	-18.2	1.55 H	15	32.7	3.1
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	*2467.00	104.5 PK			3.28 V	184	72.3	32.2
2	*2467.00	96.6 AV			3.28 V	184	64.4	32.2
3	2483.50	71.6 PK	74.0	-2.4	3.28 V	184	39.3	32.3
4	2483.50	51.3 AV	54.0	-2.7	3.28 V	184	19.0	32.3
5	4934.00	46.2 PK	74.0	-27.8	1.95 V	322	43.1	3.1
6	4934.00	35.6 AV	54.0	-18.4	1.95 V	322	32.5	3.1

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	VHT20	Channel	CH 13 : 2472 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Charles Hsiao		

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	*2472.00	100.7 PK			1.50 H	151	68.5	32.2
2	*2472.00	92.8 AV			1.50 H	151	60.6	32.2
3	2483.50	69.0 PK	74.0	-5.0	1.50 H	151	36.7	32.3
4	2483.50	53.5 AV	54.0	-0.5	1.50 H	151	21.2	32.3
5	4944.00	46.6 PK	74.0	-27.4	1.54 H	300	43.5	3.1
6	4944.00	36.0 AV	54.0	-18.0	1.54 H	300	32.9	3.1
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	*2472.00	97.9 PK			3.28 V	184	65.7	32.2
2	*2472.00	89.9 AV			3.28 V	184	57.7	32.2
3	2483.50	67.1 PK	74.0	-6.9	3.28 V	184	34.8	32.3
4	2483.50	52.3 AV	54.0	-1.7	3.28 V	184	20.0	32.3
5	4944.00	46.4 PK	74.0	-27.6	1.15 V	2	43.3	3.1
6	4944.00	35.5 AV	54.0	-18.5	1.15 V	2	32.4	3.1

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	VHT40	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=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Charles Hsiao		

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	68.2 PK	74.0	-5.8	1.50 H	151	36.0	32.2
2	2390.00	53.4 AV	54.0	-0.6	1.50 H	151	21.2	32.2
3	*2422.00	101.9 PK			1.50 H	151	69.7	32.2
4	*2422.00	93.8 AV			1.50 H	151	61.6	32.2
5	4844.00	46.5 PK	74.0	-27.5	1.17 H	48	43.6	2.9
6	4844.00	35.7 AV	54.0	-18.3	1.17 H	48	32.8	2.9
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	67.2 PK	74.0	-6.8	3.28 V	184	35.0	32.2
2	2390.00	52.0 AV	54.0	-2.0	3.28 V	184	19.8	32.2
3	*2422.00	99.1 PK			3.28 V	184	66.9	32.2
4	*2422.00	91.0 AV			3.28 V	184	58.8	32.2
5	4844.00	46.4 PK	74.0	-27.6	1.65 V	359	43.5	2.9
6	4844.00	35.2 AV	54.0	-18.8	1.65 V	359	32.3	2.9

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	VHT40	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 °C, 65 % RH
Tested By	Charles Hsiao		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	67.2 PK	74.0	-6.8	1.50 H	151	35.0	32.2
2	2390.00	51.7 AV	54.0	-2.3	1.50 H	151	19.5	32.2
3	*2437.00	105.8 PK			1.50 H	151	73.6	32.2
4	*2437.00	97.1 AV			1.50 H	151	64.9	32.2
5	2483.50	71.3 PK	74.0	-2.7	1.50 H	151	39.0	32.3
6	2483.50	53.0 AV	54.0	-1.0	1.50 H	151	20.7	32.3
7	4874.00	45.9 PK	74.0	-28.1	1.57 H	130	42.9	3.0
8	4874.00	35.4 AV	54.0	-18.6	1.57 H	130	32.4	3.0
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	2390.00	65.4 PK	74.0	-8.6	3.28 V	184	33.2	32.2
2	2390.00	49.7 AV	54.0	-4.3	3.28 V	184	17.5	32.2
3	*2437.00	102.4 PK			3.28 V	184	70.2	32.2
4	*2437.00	94.4 AV			3.28 V	184	62.2	32.2
5	2483.50	68.8 PK	74.0	-5.2	3.28 V	184	36.5	32.3
6	2483.50	51.6 AV	54.0	-2.4	3.28 V	184	19.3	32.3
7	4874.00	45.5 PK	74.0	-28.5	1.57 V	207	42.5	3.0
8	4874.00	35.0 AV	54.0	-19.0	1.57 V	207	32.0	3.0

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.

RF Mode	VHT40	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=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 65 % RH
Tested By	Charles Hsiao		

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	102.1 PK			1.50 H	151	69.9	32.2
2	*2452.00	94.0 AV			1.50 H	151	61.8	32.2
3	2483.50	68.7 PK	74.0	-5.3	1.50 H	151	36.4	32.3
4	2483.50	52.9 AV	54.0	-1.1	1.50 H	151	20.6	32.3
5	4904.00	46.2 PK	74.0	-27.8	1.95 H	322	43.1	3.1
6	4904.00	35.6 AV	54.0	-18.4	1.95 H	322	32.5	3.1
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	*2452.00	100.1 PK			3.28 V	184	67.9	32.2
2	*2452.00	92.1 AV			3.28 V	184	59.9	32.2
3	2483.50	68.2 PK	74.0	-5.8	3.28 V	184	35.9	32.3
4	2483.50	51.4 AV	54.0	-2.6	3.28 V	184	19.1	32.3
5	4904.00	46.0 PK	74.0	-28.0	1.15 V	21	42.9	3.1
6	4904.00	35.5 AV	54.0	-18.5	1.15 V	21	32.4	3.1

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	VHT40	Channel	CH 10 : 2457 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 °C, 65 % RH
Tested By	Charles Hsiao		

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	*2457.00	103.4 PK			1.50 H	151	71.2	32.2
2	*2457.00	94.2 AV			1.50 H	151	62.0	32.2
3	2483.50	69.6 PK	74.0	-4.4	1.50 H	151	37.3	32.3
4	2483.50	53.0 AV	54.0	-1.0	1.50 H	151	20.7	32.3
5	4914.00	45.9 PK	74.0	-28.1	1.15 H	219	42.8	3.1
6	4914.00	35.4 AV	54.0	-18.6	1.15 H	219	32.3	3.1
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	*2457.00	100.3 PK			3.28 V	184	68.1	32.2
2	*2457.00	91.0 AV			3.28 V	184	58.8	32.2
3	2483.50	69.5 PK	74.0	-4.5	3.28 V	184	37.2	32.3
4	2483.50	51.5 AV	54.0	-2.5	3.28 V	184	19.2	32.3
5	4914.00	45.4 PK	74.0	-28.6	1.05 V	284	42.3	3.1
6	4914.00	35.2 AV	54.0	-18.8	1.05 V	284	32.1	3.1

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	VHT40	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 °C, 65 % RH
Tested By	Charles Hsiao		

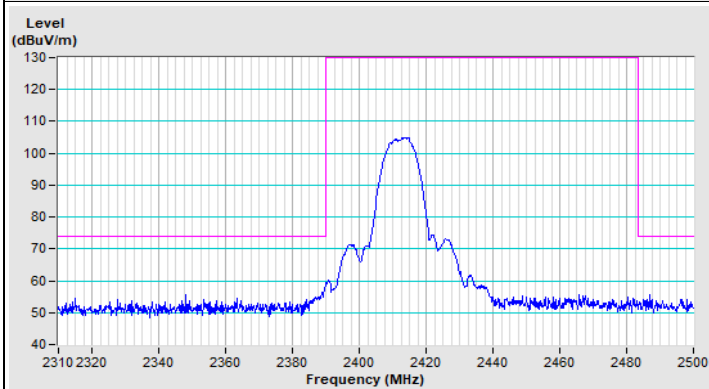
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	101.6 PK			1.50 H	151	69.4	32.2
2	*2462.00	92.2 AV			1.50 H	151	60.0	32.2
3	2483.50	71.7 PK	74.0	-2.3	1.50 H	151	39.4	32.3
4	2483.50	53.5 AV	54.0	-0.5	1.50 H	151	21.2	32.3
5	4924.00	46.1 PK	74.0	-27.9	1.65 H	333	43.0	3.1
6	4924.00	36.3 AV	54.0	-17.7	1.65 H	333	33.2	3.1
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	*2462.00	99.2 PK			3.28 V	184	67.0	32.2
2	*2462.00	90.1 AV			3.28 V	184	57.9	32.2
3	2483.50	68.0 PK	74.0	-6.0	3.28 V	184	35.7	32.3
4	2483.50	51.7 AV	54.0	-2.3	3.28 V	184	19.4	32.3
5	4924.00	45.5 PK	74.0	-28.5	1.17 V	314	42.4	3.1
6	4924.00	35.7 AV	54.0	-18.3	1.17 V	314	32.6	3.1

Remarks:

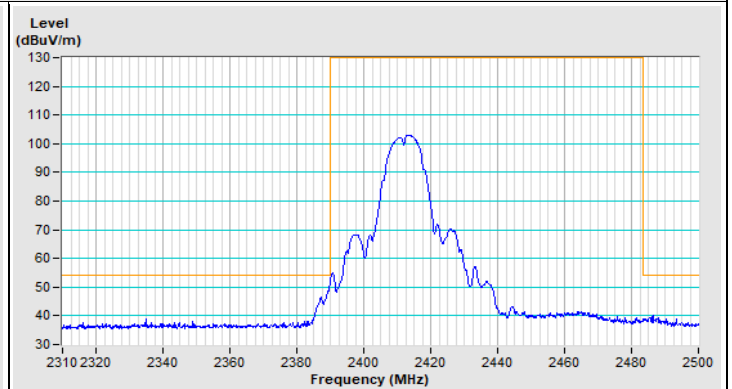
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency,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

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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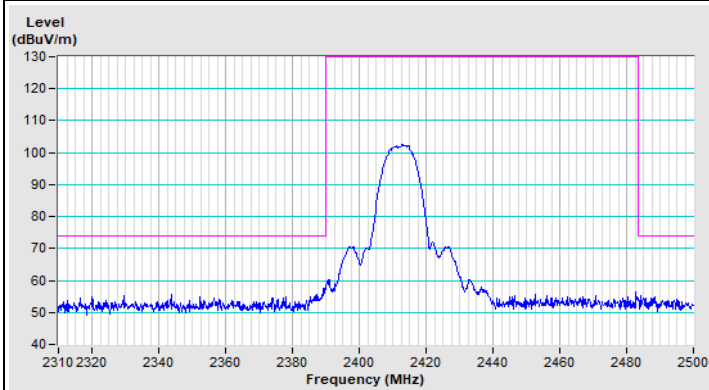
802.11b Channel 1



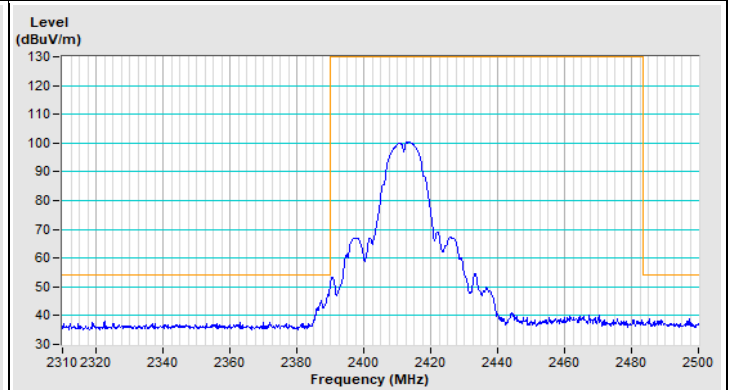
Horizontal (Peak)



Horizontal (Average)

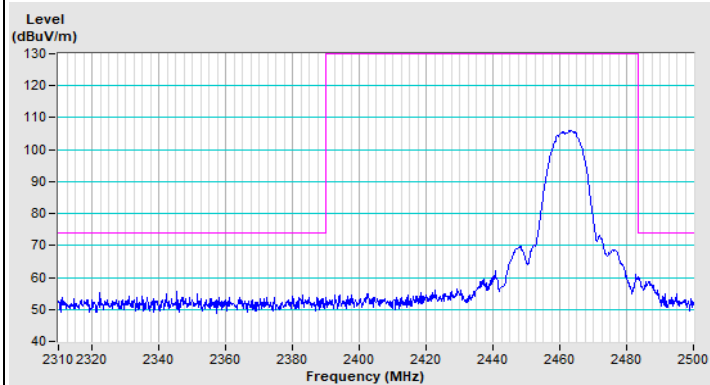


Vertical (Peak)

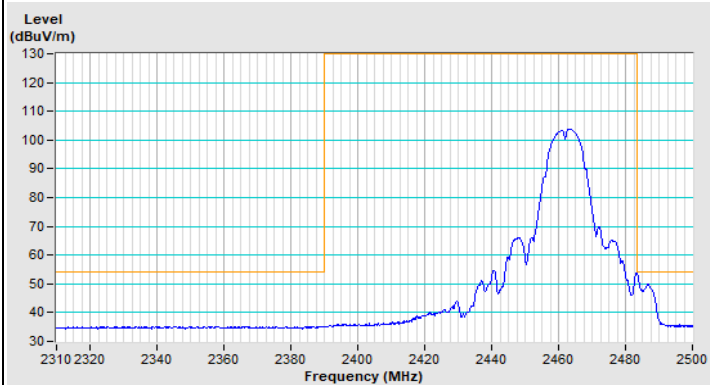


Vertical (Average)

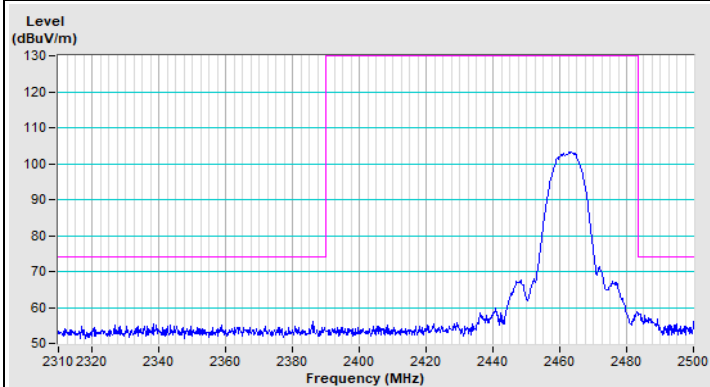
802.11b Channel 11



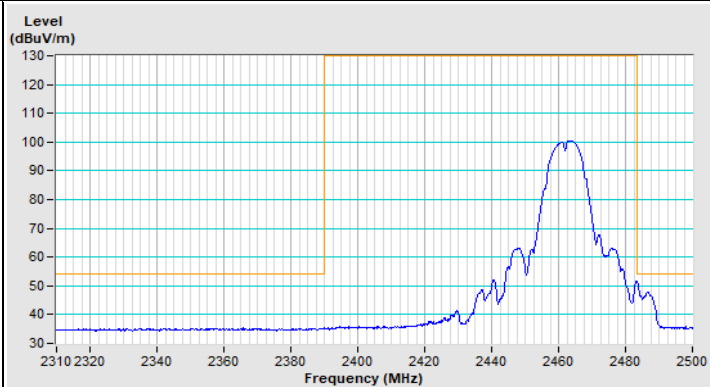
Horizontal (Peak)



Horizontal (Average)

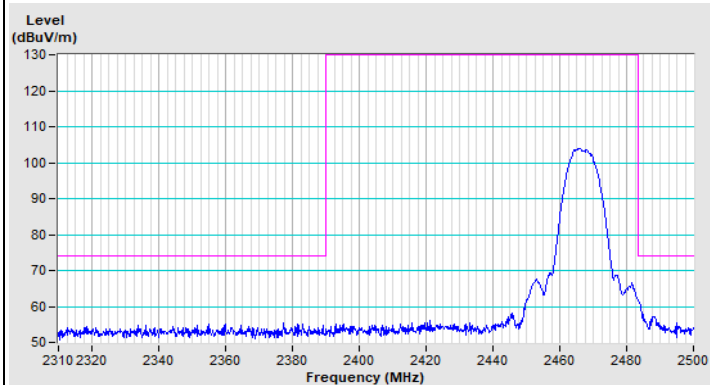


Vertical (Peak)

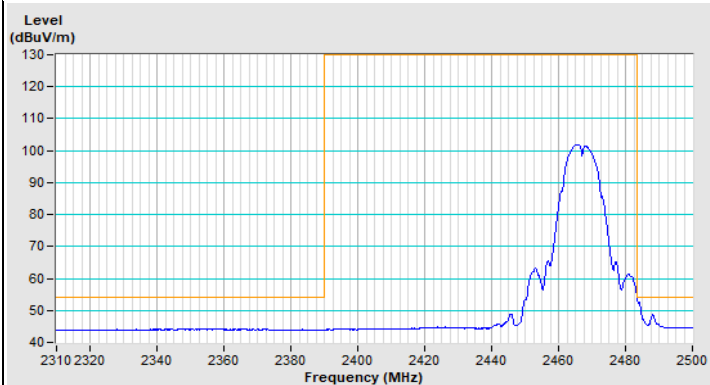


Vertical (Average)

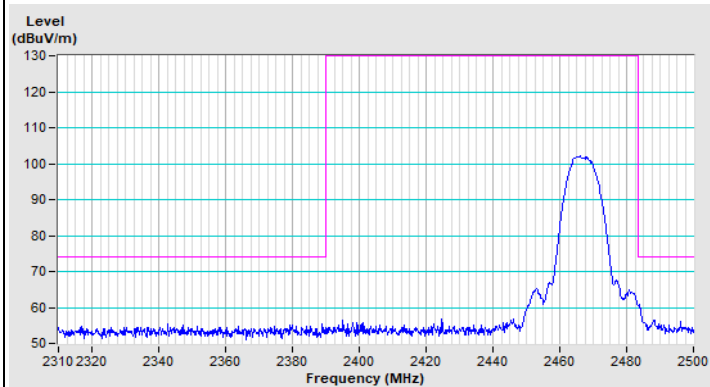
802.11b Channel 12



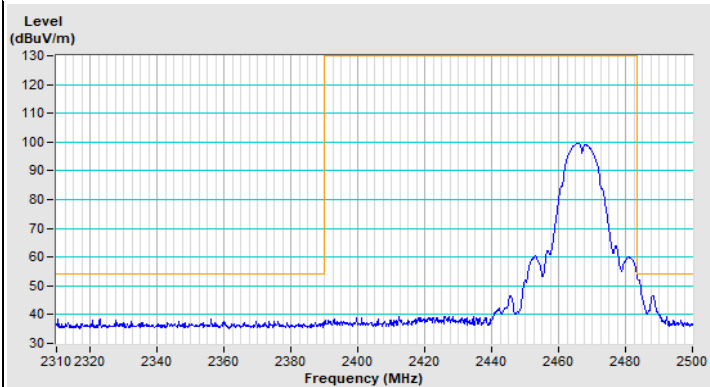
Horizontal (Peak)



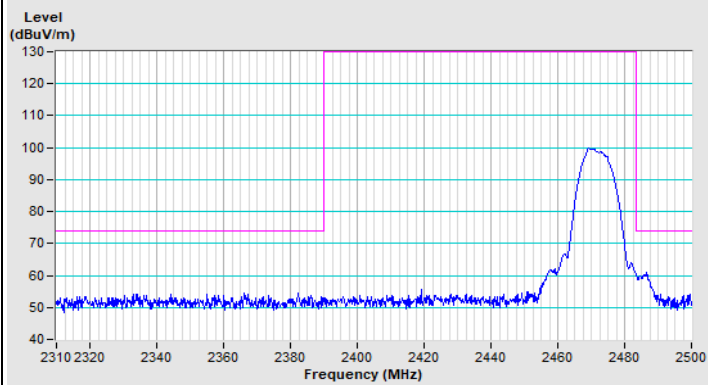
Horizontal (Average)



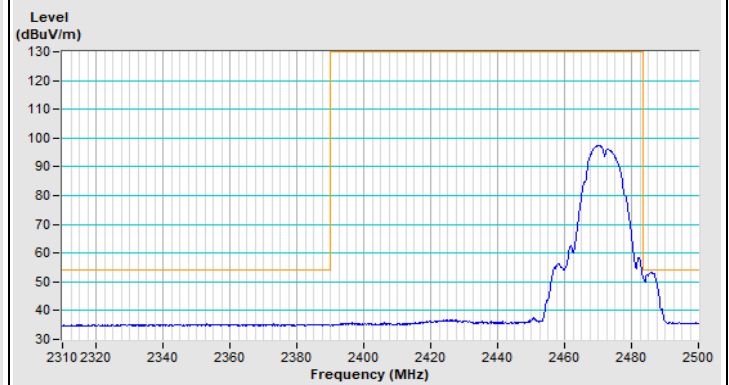
Vertical (Peak)



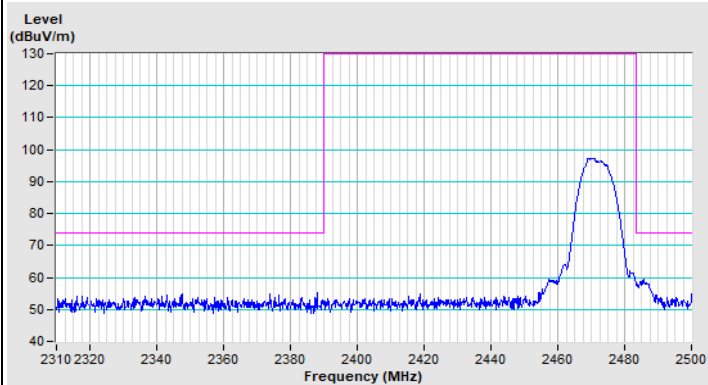
Vertical (Average)

802.11b Channel 13

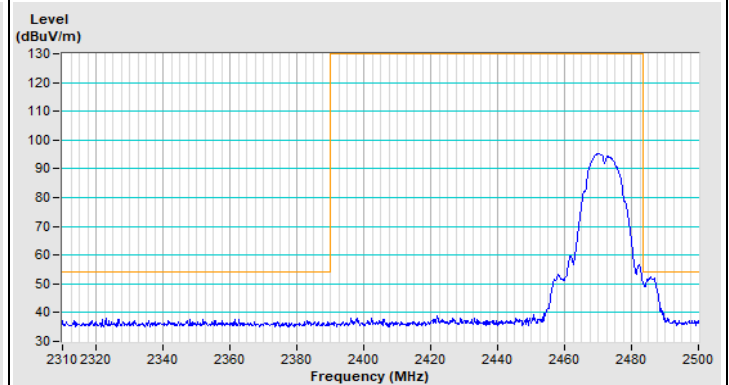
Horizontal (Peak)



Horizontal (Average)



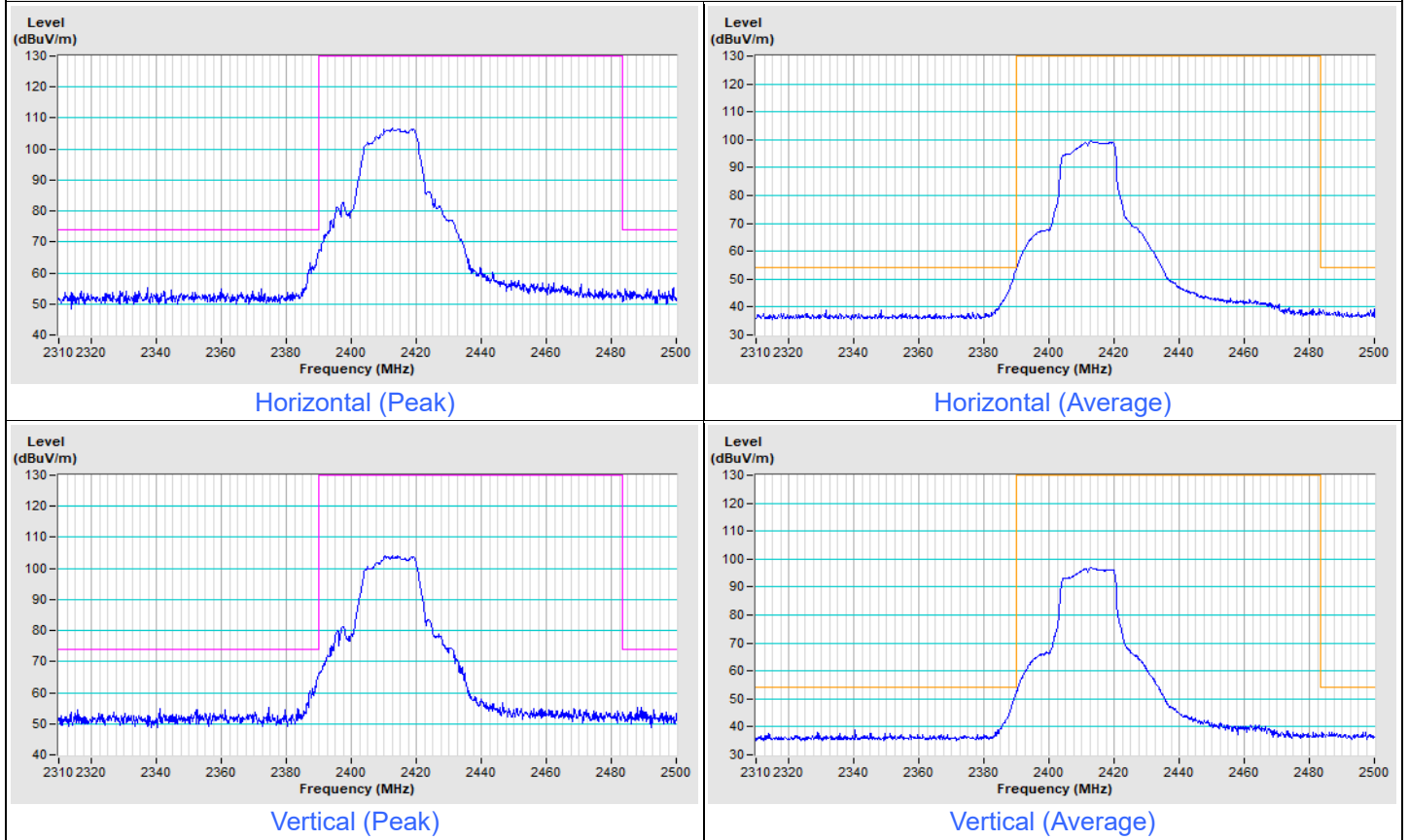
Vertical (Peak)



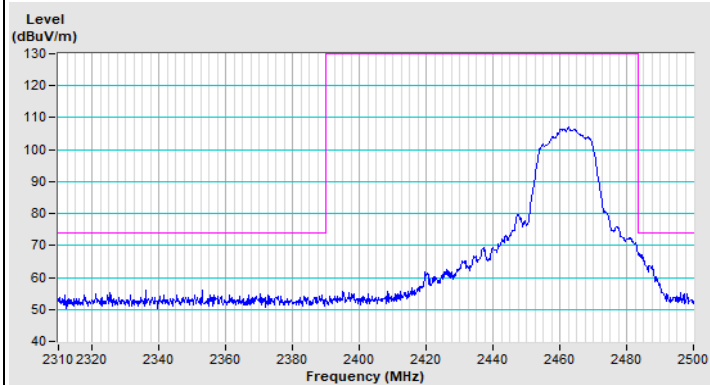
Vertical (Average)

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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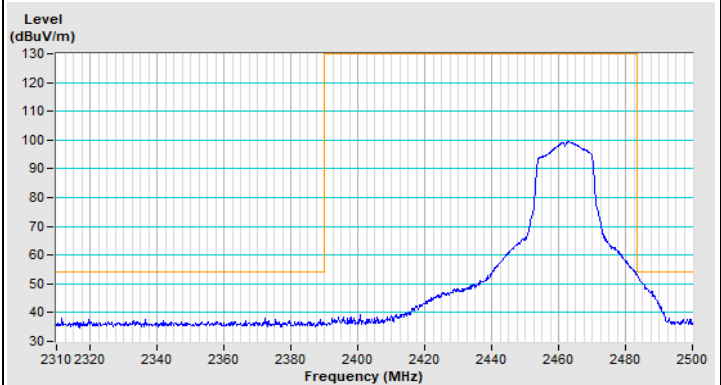
802.11g Channel 1



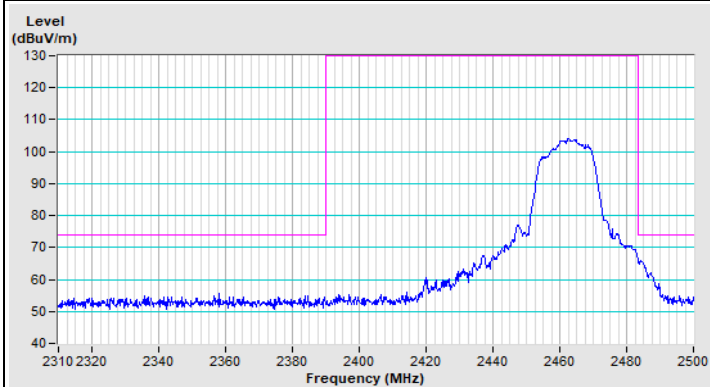
802.11g Channel 11



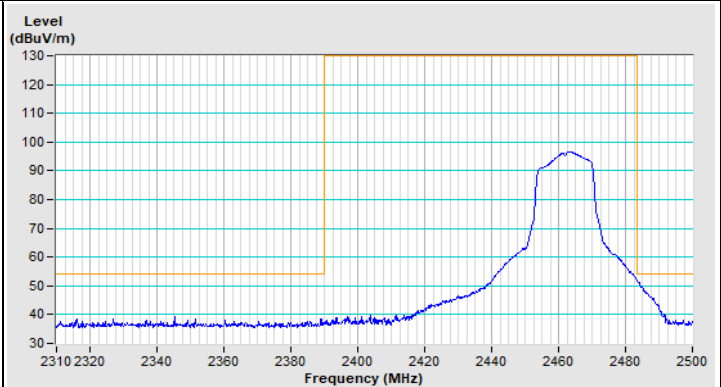
Horizontal (Peak)



Horizontal (Average)

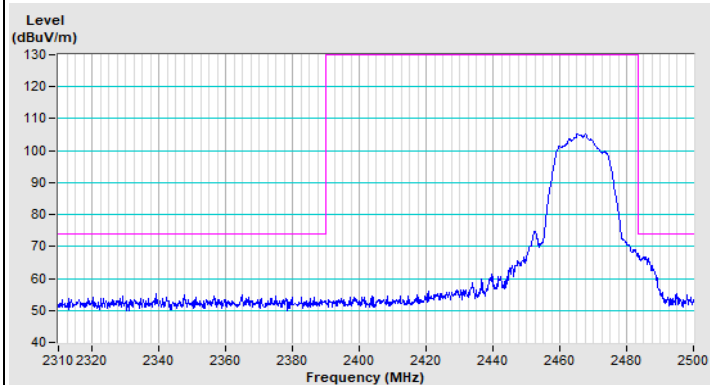


Vertical (Peak)

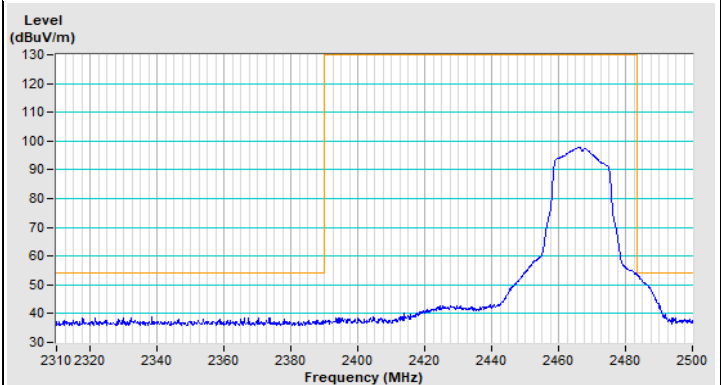


Vertical (Average)

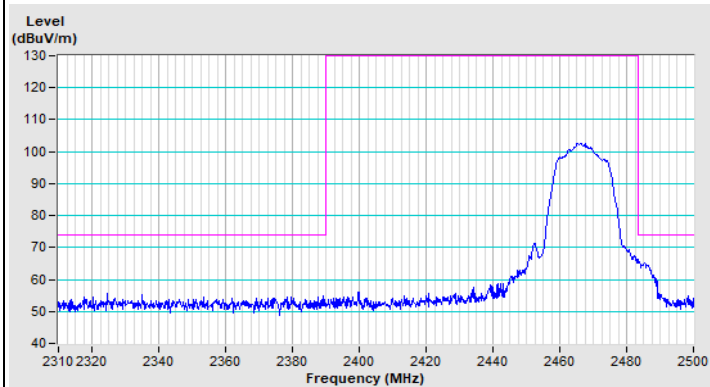
802.11g Channel 12



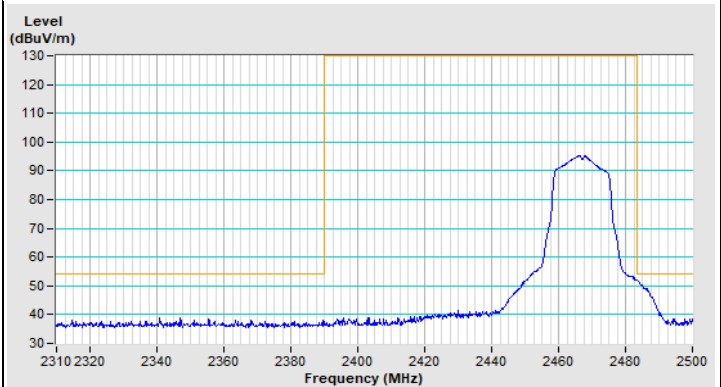
Horizontal (Peak)



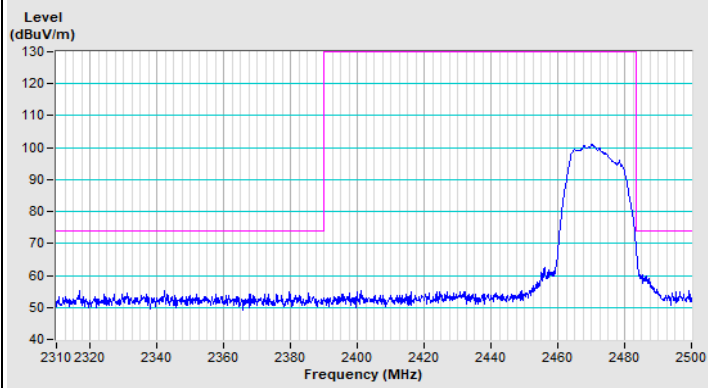
Horizontal (Average)



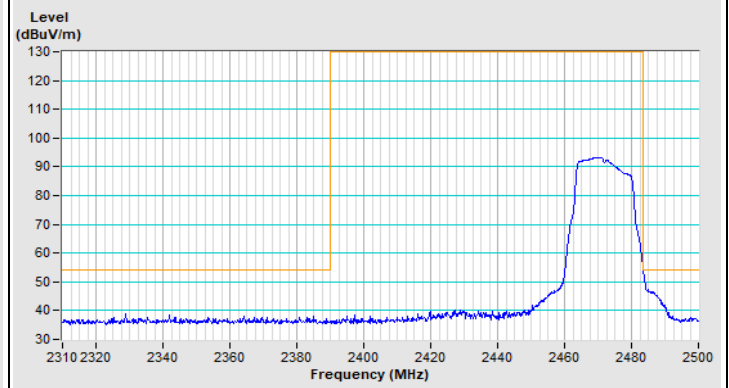
Vertical (Peak)



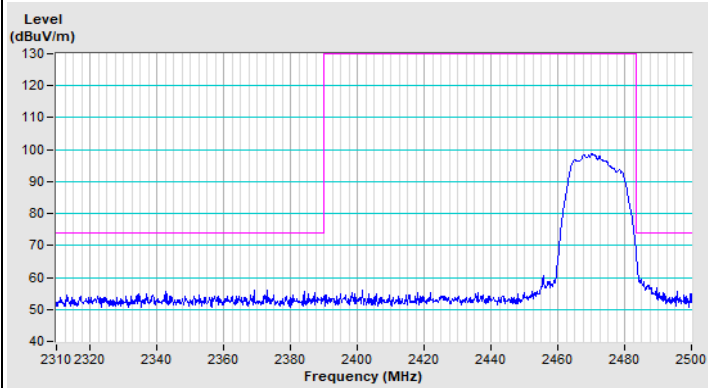
Vertical (Average)

802.11g Channel 13

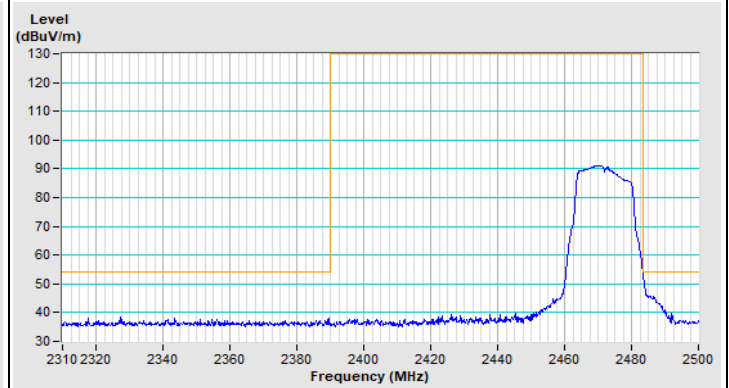
Horizontal (Peak)



Horizontal (Average)



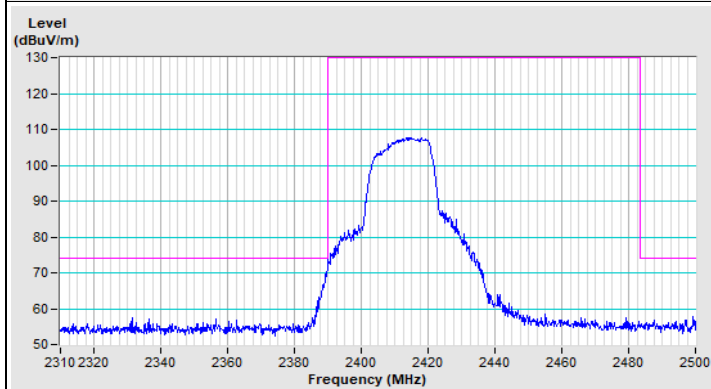
Vertical (Peak)



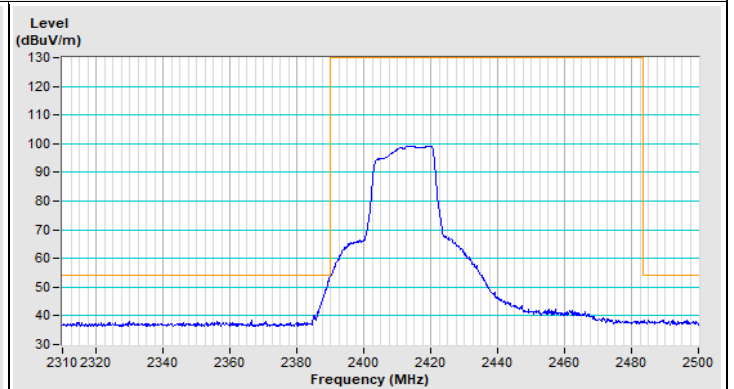
Vertical (Average)

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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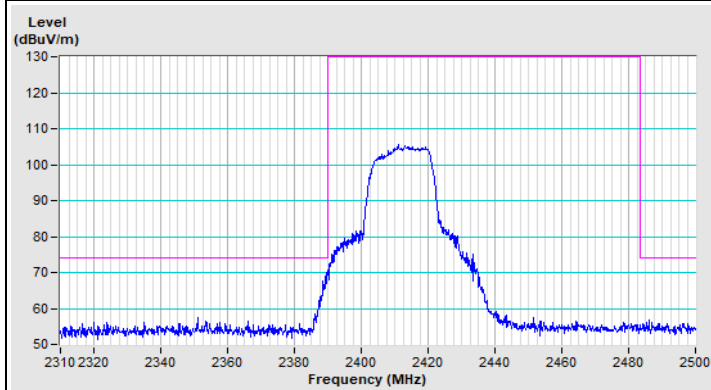
VHT20 Channel 1



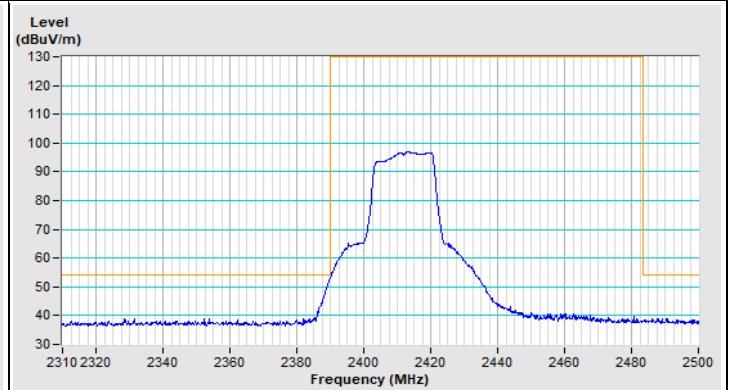
Horizontal (Peak)



Horizontal (Average)

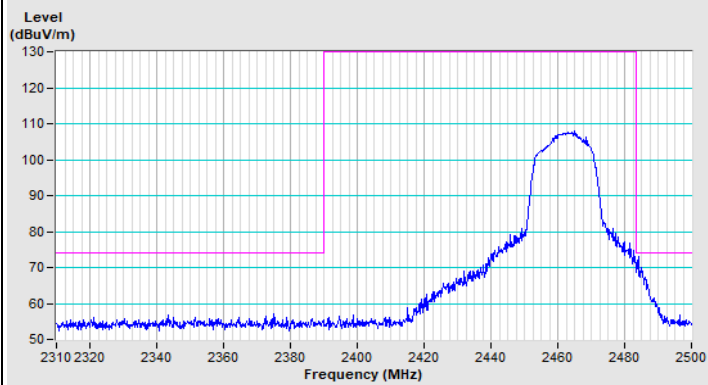


Vertical (Peak)

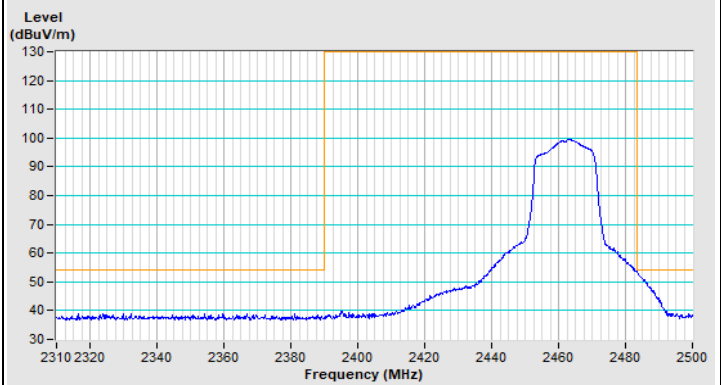


Vertical (Average)

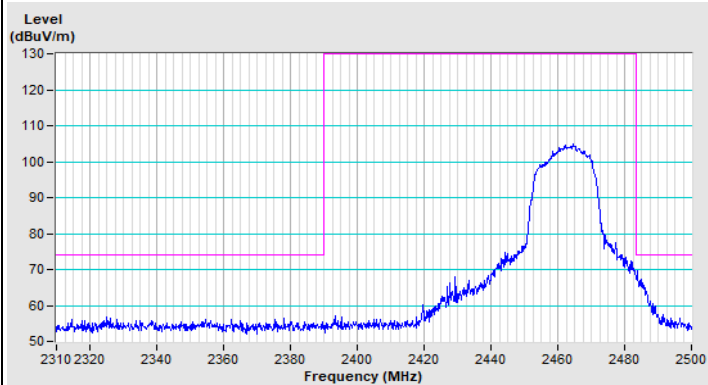
VHT20 Channel 11



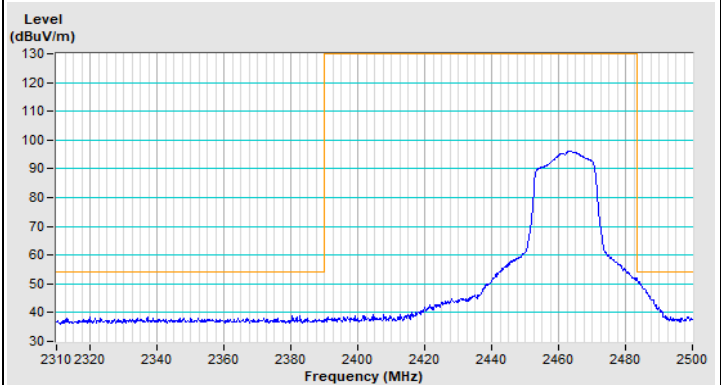
Horizontal (Peak)



Horizontal (Average)

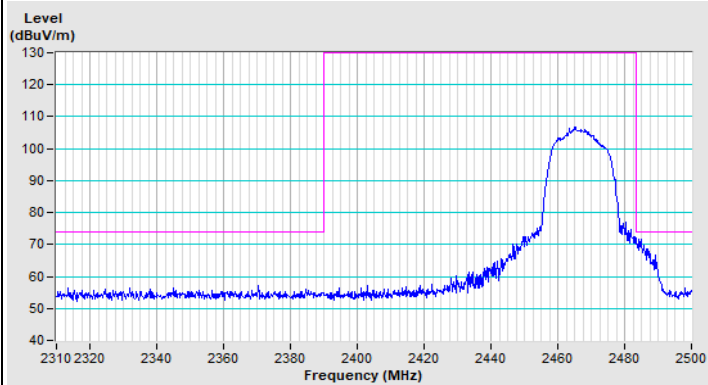


Vertical (Peak)

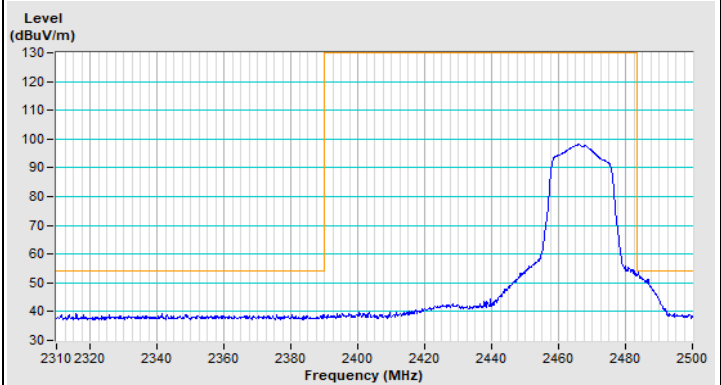


Vertical (Average)

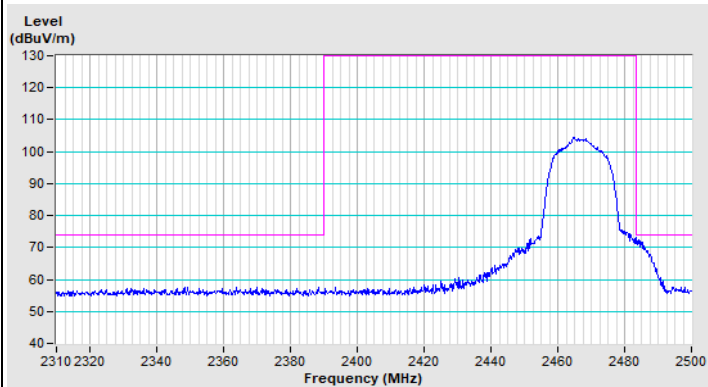
VHT20 Channel 12



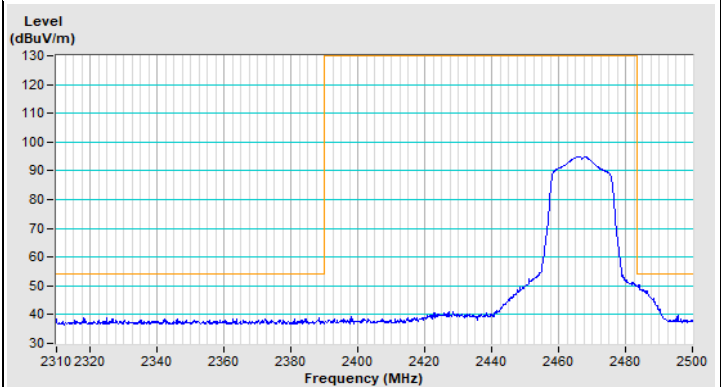
Horizontal (Peak)



Horizontal (Average)

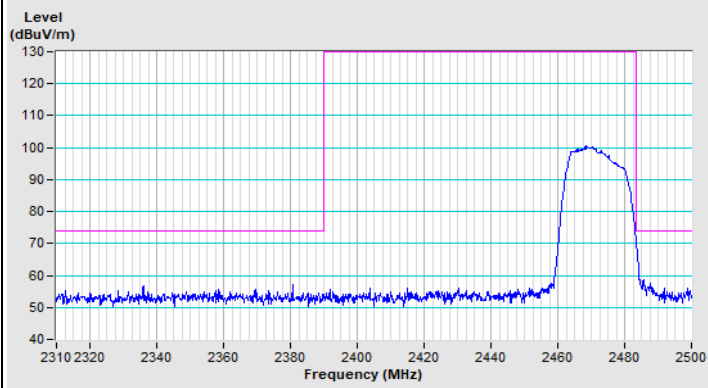


Vertical (Peak)

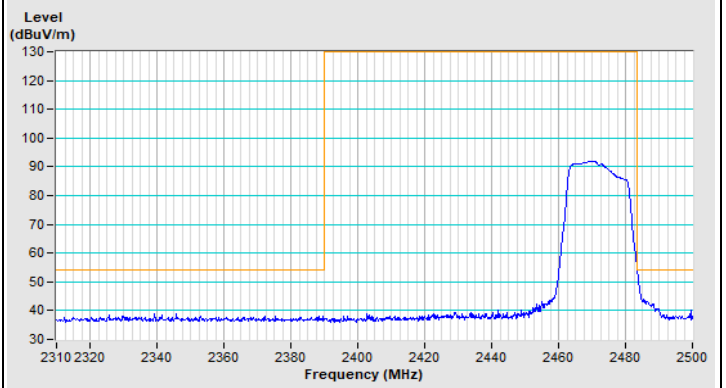


Vertical (Average)

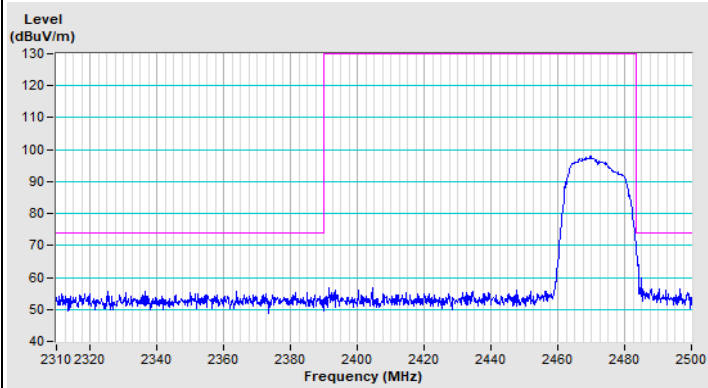
VHT20 Channel 13



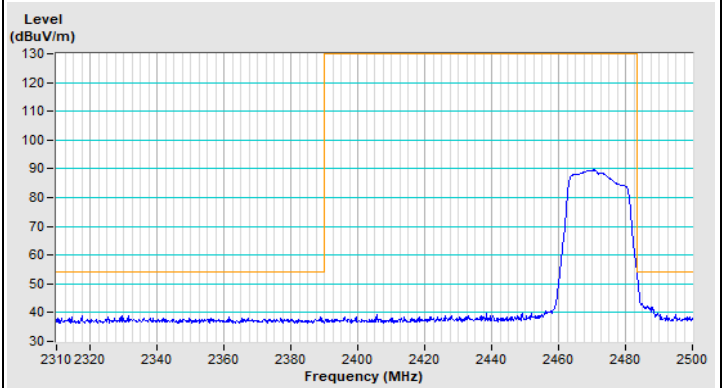
Horizontal (Peak)



Horizontal (Average)



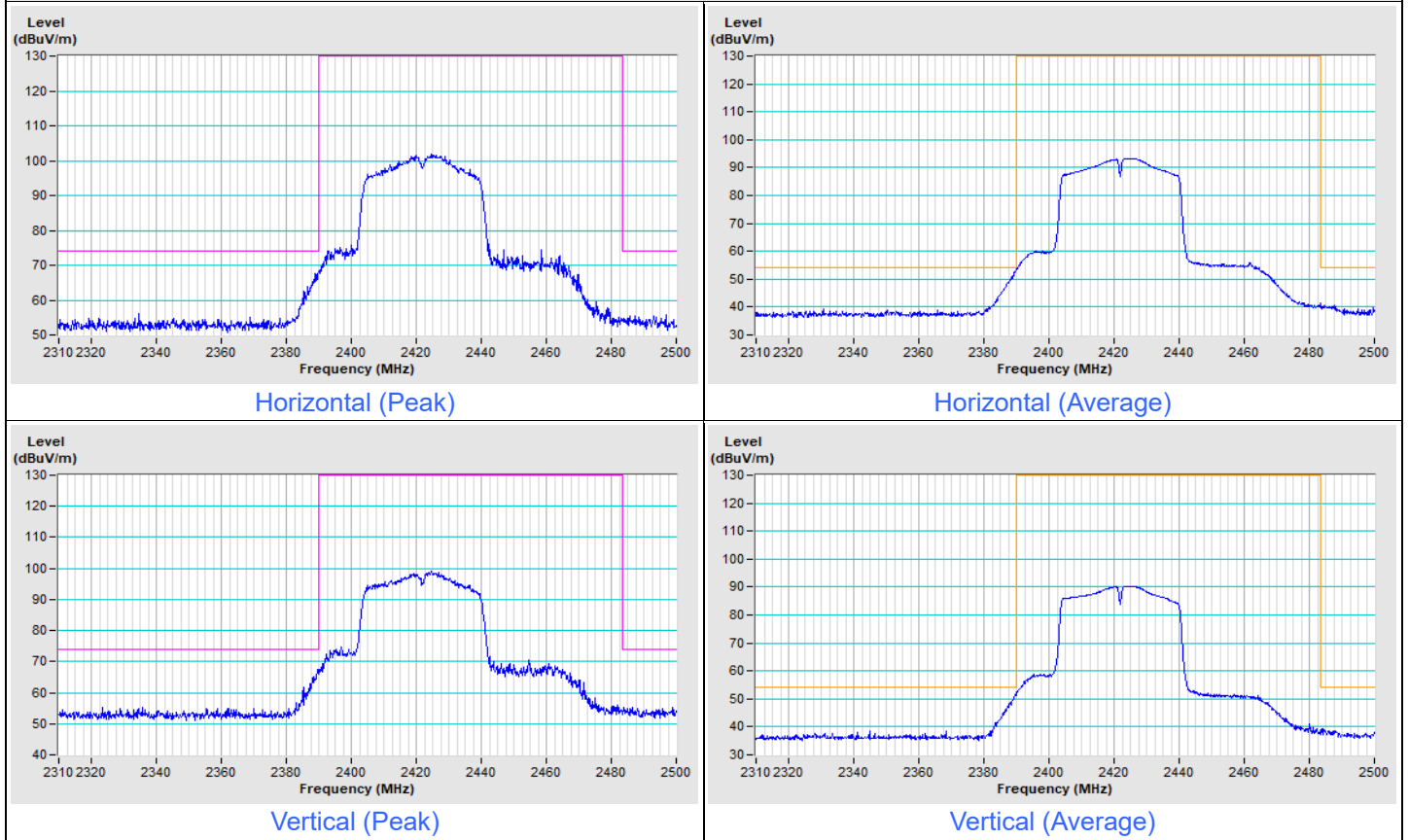
Vertical (Peak)



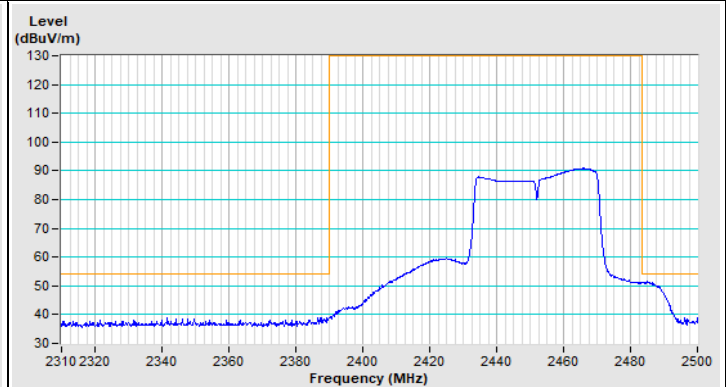
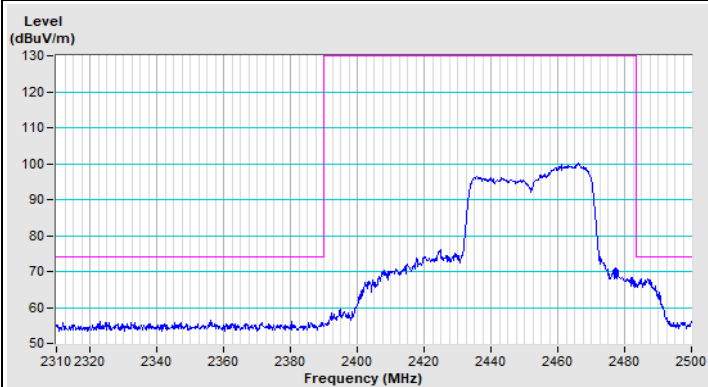
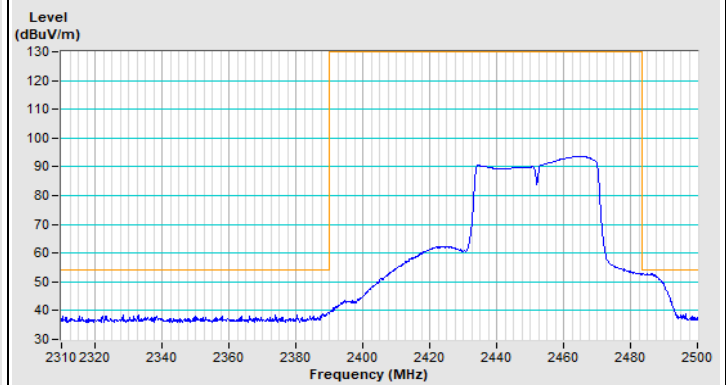
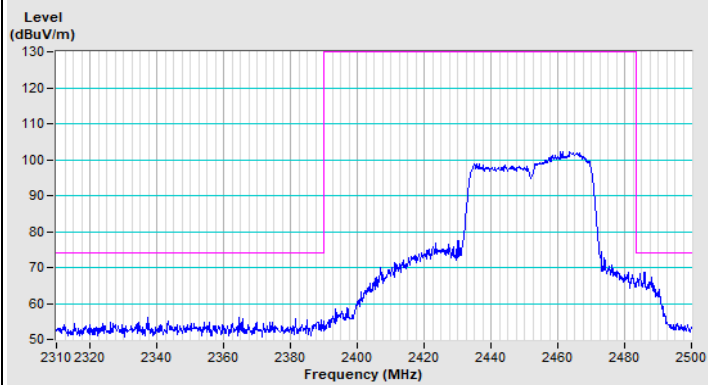
Vertical (Average)

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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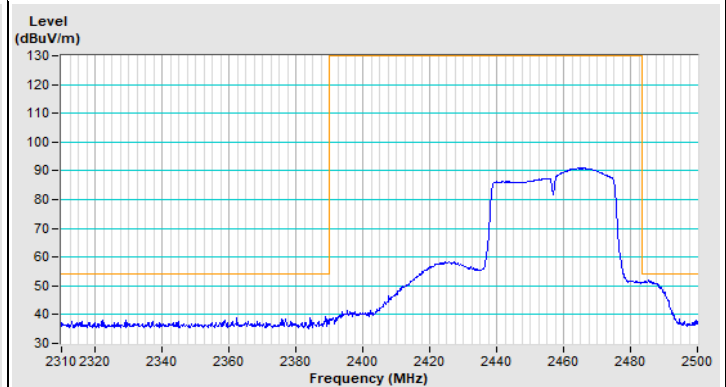
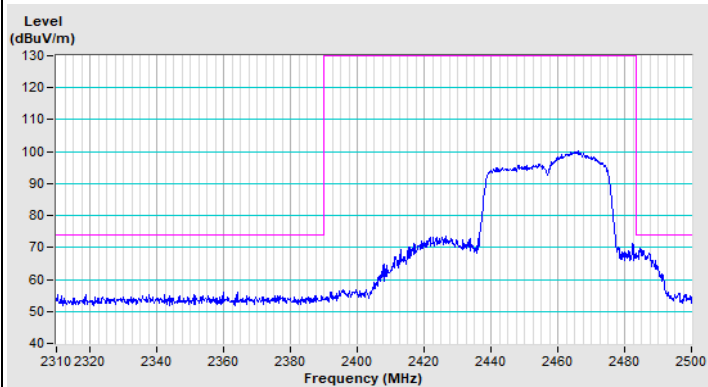
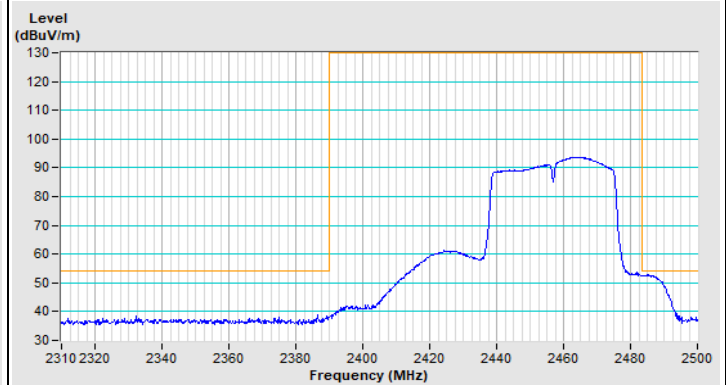
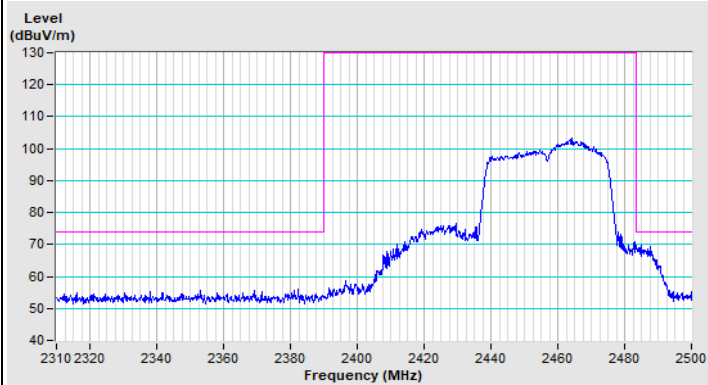
VHT40 Channel 3



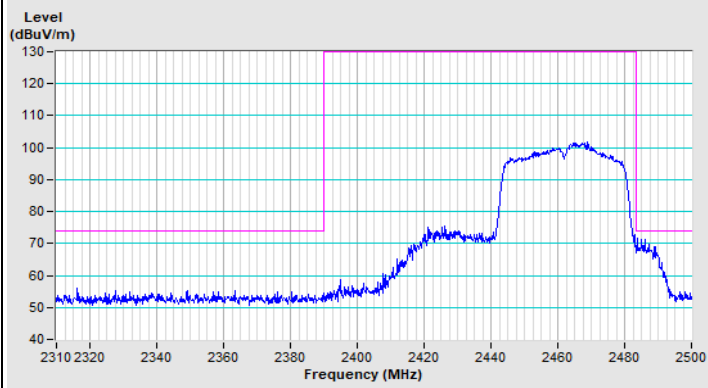
VHT40 Channel 9



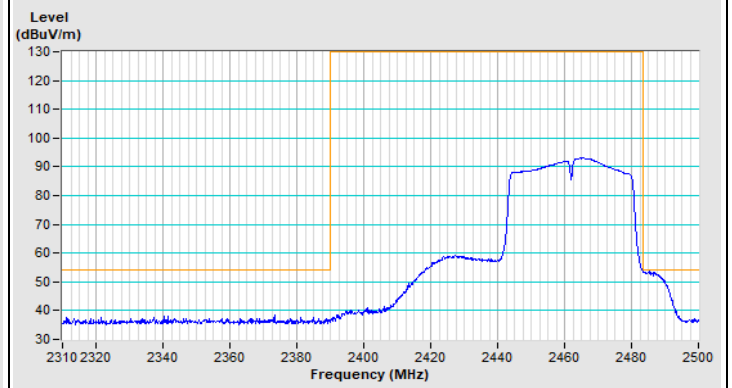
VHT40 Channel 10



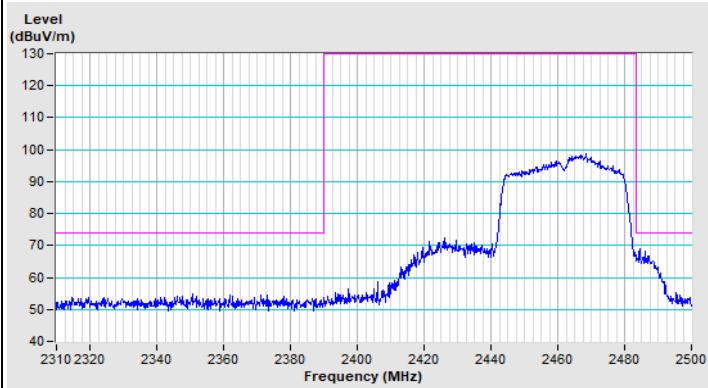
VHT40 Channel 11



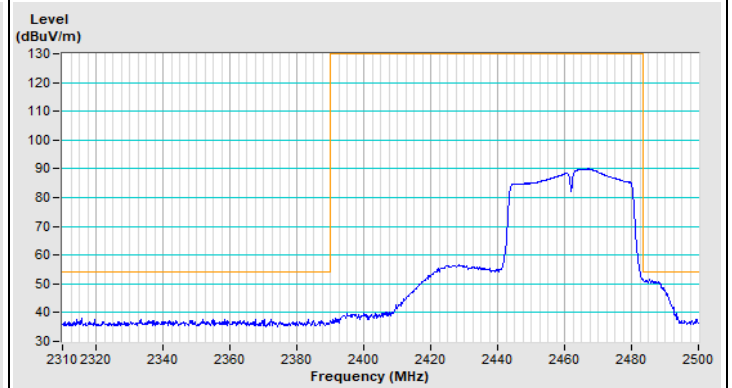
Horizontal (Peak)



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

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