

TEST REPORT

CERTIFICATE OF CONFORMITY

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

Report No.: RFBEIH-WTW-P24110561

FCC ID: 2ASK5AIOID5GSC03

Product: Nokia AIOSC Indoor 5G

Brand: Nokia

Model No.: Nokia AIOSC Indoor 5G n48

Received Date: 2024/11/19

Test Date: 2025/1/21 ~ 2025/10/9

Issued Date: 2025/11/12

Applicant: Nokia

Address: 3201 Olympus Blvd Dallas, TX 75019

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lin Kou Laboratories

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

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

Approved by:



Date:

2025/11/12

Jeremy Lin / Project Engineer

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Prepared by : Gina Liu / Specialist

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Table of Contents

Release Control Record	4
1 Certificate.....	5
2 Summary of Test Results	6
2.1 Measurement Uncertainty	6
2.2 Supplementary Information	6
3 General Information	7
3.1 General Description	7
3.2 Antenna Description of EUT	8
3.3 Channel List	8
3.4 Test Mode Applicability and Tested Channel Detail	9
3.5 Duty Cycle of Test Signal	10
3.6 Test Program Used and Operation Descriptions	12
3.7 Connection Diagram of EUT and Peripheral Devices	12
3.8 Configuration of Peripheral Devices and Cable Connections	13
4 Test Instruments	14
4.1 RF Output Power	14
4.2 Power Spectral Density	14
4.3 6 dB Bandwidth	14
4.4 Conducted Out of Band Emissions	14
4.5 AC Power Conducted Emissions	15
4.6 Unwanted Emissions below 1 GHz	16
4.7 Unwanted Emissions above 1 GHz	17
5 Limits of Test Items.....	18
5.1 RF Output Power	18
5.2 Power Spectral Density	18
5.3 6 dB Bandwidth	18
5.4 Conducted Out of Band Emissions	18
5.5 AC Power Conducted Emissions	18
5.6 Unwanted Emissions below 1 GHz	18
5.7 Unwanted Emissions above 1 GHz	19
6 Test Arrangements	20
6.1 RF Output Power	20
6.1.1 Test Setup	20
6.1.2 Test Procedure	20
6.2 Power Spectral Density	20
6.2.1 Test Setup	20
6.2.2 Test Procedure	20
6.3 6 dB Bandwidth	21
6.3.1 Test Setup	21
6.3.2 Test Procedure	21
6.4 Conducted Out of Band Emissions	22
6.4.1 Test Setup	22
6.4.2 Test Procedure	22
6.5 AC Power Conducted Emissions	23
6.5.1 Test Setup	23
6.5.2 Test Procedure	23
6.6 Unwanted Emissions below 1 GHz	24
6.6.1 Test Setup	24
6.6.2 Test Procedure	25
6.7 Unwanted Emissions above 1 GHz	26
6.7.1 Test Setup	26
6.7.2 Test Procedure	26
7 Test Results of Test Item	27

7.1	RF Output Power.....	27
7.2	Power Spectral Density	29
7.3	6 dB Bandwidth	31
7.4	Conducted Out of Band Emissions	33
7.5	AC Power Conducted Emissions	41
7.6	Unwanted Emissions below 1 GHz	45
7.7	Unwanted Emissions above 1 GHz.....	49
8	Pictures of Test Arrangements	85
9	Information of the Testing Laboratories	86

Release Control Record

Issue No.	Description	Date Issued
RFBEIH-WTW-P24110561	Original release.	2025/11/12

1 Certificate

Product: Nokia AIO SC Indoor 5G

Brand: Nokia

Test Model: Nokia AIO SC Indoor 5G n48

Sample Status: Engineering sample

Applicant: Nokia

Test Date: 2025/1/21 ~ 2025/10/9

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 -6.58 dB at 0.33800 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -6.6 dB at 69.77 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.2 dB at 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:

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	2.90 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.00 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	Nokia AIOSC Indoor 5G
Brand	Nokia
Test Model	Nokia AIOSC Indoor 5G n48
Status of EUT	Engineering sample
Power Supply Rating	12 Vdc (Adapter) 56 Vdc (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 150 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	67.92 mW (18.32 dBm)

Note:

1. The EUT uses following accessories.

Item	Brand	Model	Specification
AC Adapter 1	Mass Power Electronics Inc.	NBS100A120600M2	AC Input : 100-240Vac, 50/60Hz, 1.6A DC Output : 12.0V, 6.0A, 72.0W DC Output Cable : 2pin, 1.5m non shielded without core
AC Adapter 2	Mass Power Electronics Inc.	NBS100A120600M3	AC Input : 100-240Vac, 50/60Hz, 1.6A DC Output : 12.0V, 6.0A, 72.0W DC Output Cable : 3pin, 1.5m non shielded 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.

Antenna NO.	Peak Gain (dBi)	Frequency range (GHz)	Antenna Type	Connector Type
1	4.83	2.4 ~ 2.4835	PIFA	SMA-MMCX

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

**The product is an indoor Small Cell, with built-in antenna as the primary usage scenario.

2. The EUT incorporates a SISO function:

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

Note:

- The modulation and bandwidth are similar for 802.11n mode for 20 MHz (40 MHz), 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:	- 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. - EUT has the following operations / usages: AC power adapter 1 / AC power adapter 2. Pre-scan these operations/ usages and find the worst case as a representative test condition. - 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:Z-axis - AC power adapter Worst Condition: AC power adapter 1

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, 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	A	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	A	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
Conducted Out of Band Emissions	A	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	A	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			

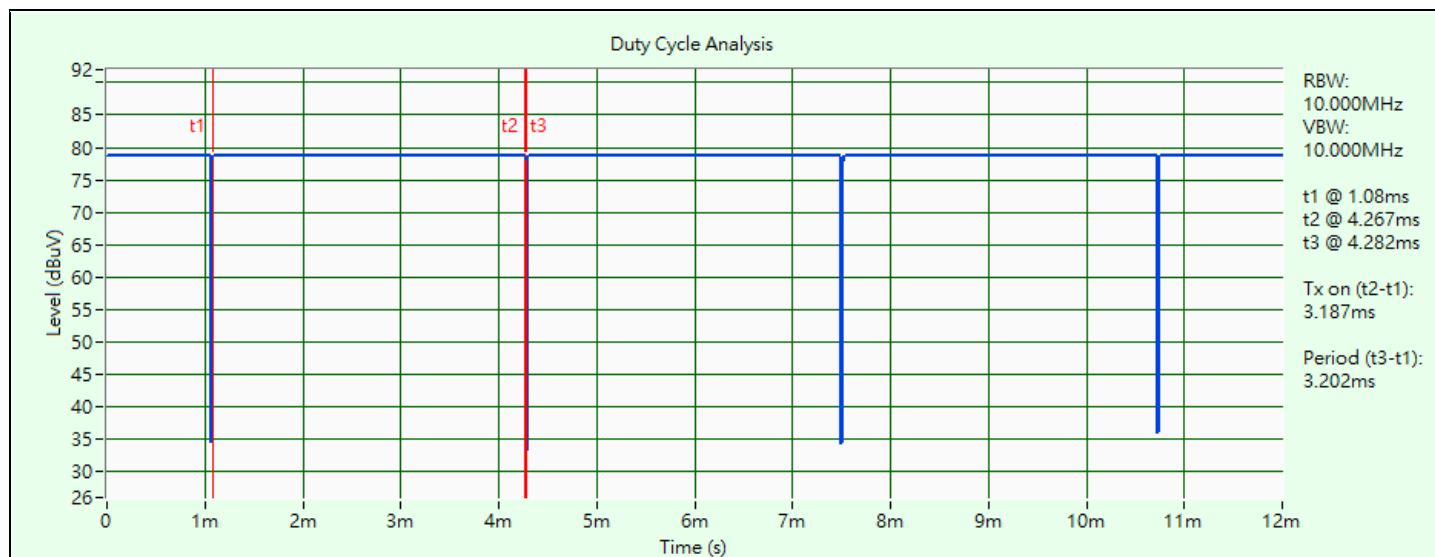
3.5 Duty Cycle of Test Signal

802.11b: Duty cycle = 3.187 ms / 3.202 ms x 100% = 99.5%

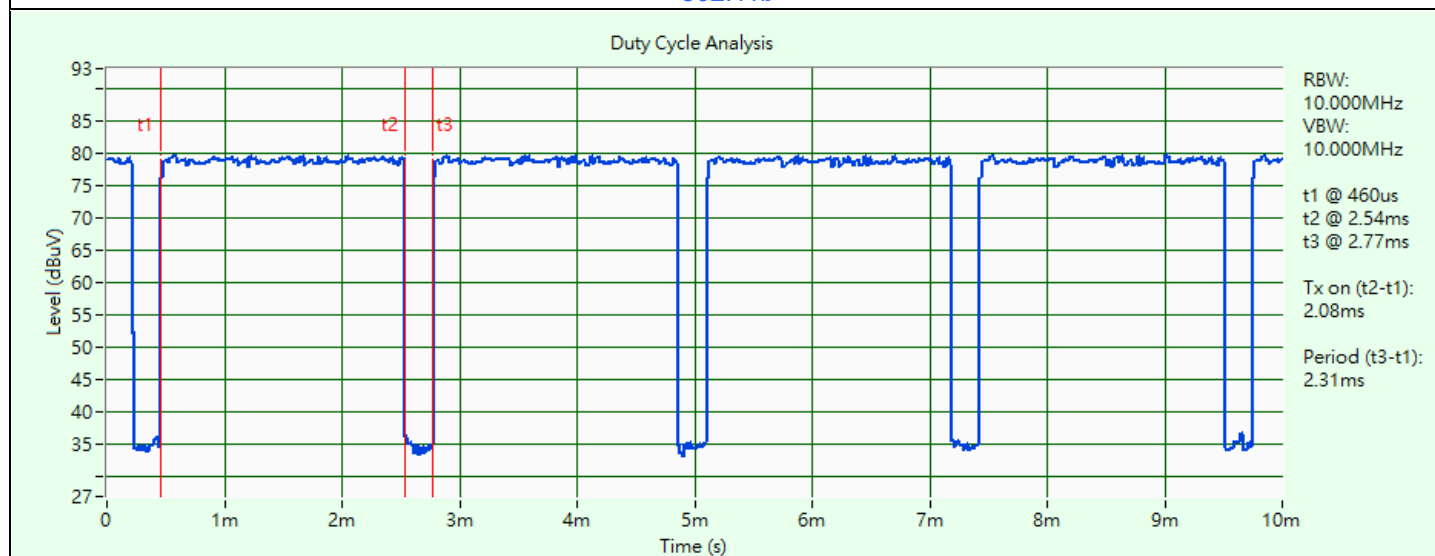
802.11g: Duty cycle = 2.08 ms / 2.31 ms x 100% = 90.0%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.46 \text{ dB}$

VHT20: Duty cycle = 4.32 ms / 4.536 ms x 100% = 95.2%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.21 \text{ dB}$

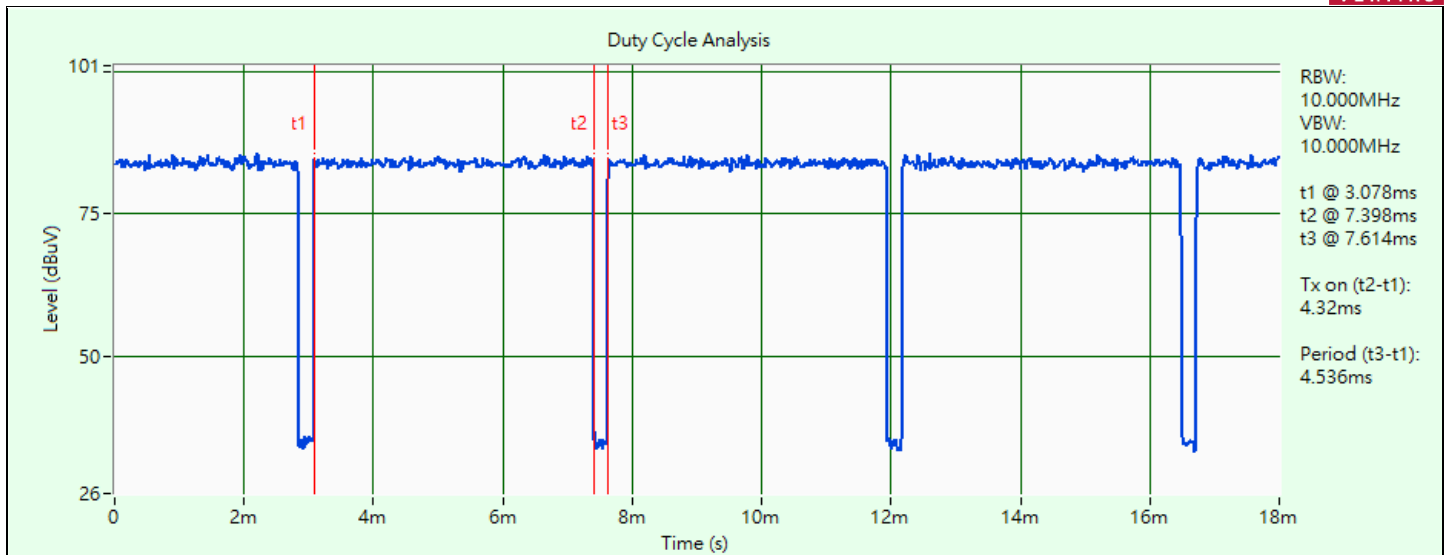
VHT40: Duty cycle = 2.11 ms / 2.34 ms x 100% = 90.2%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.45 \text{ dB}$



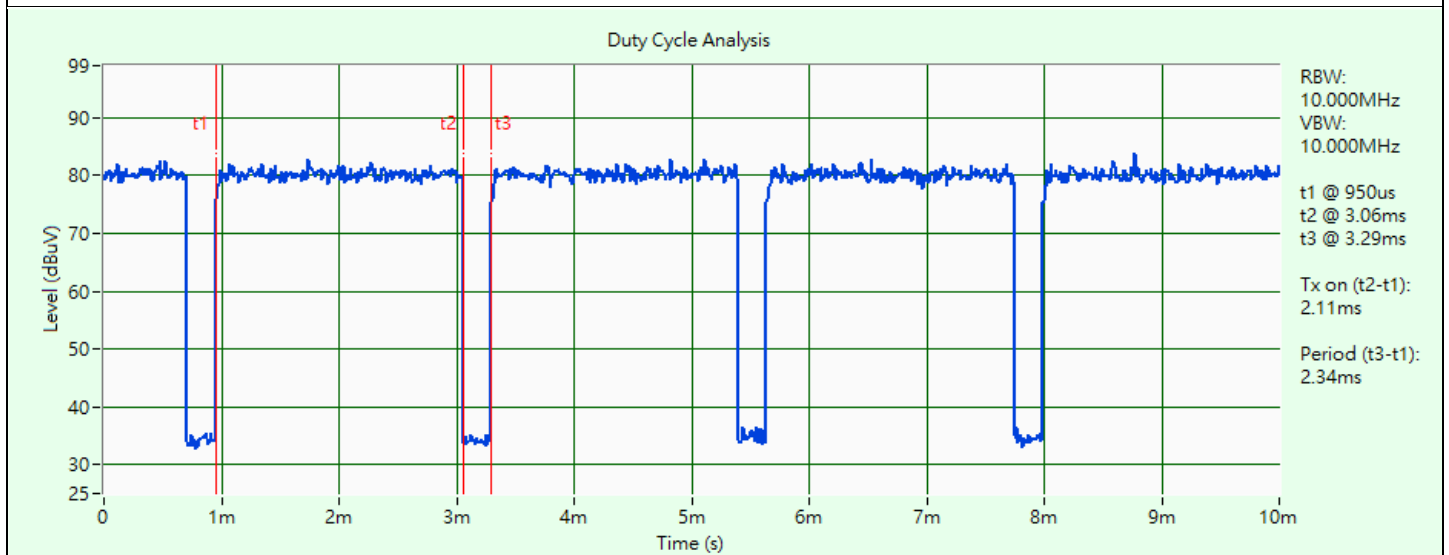
802.11b



802.11g



VHT20



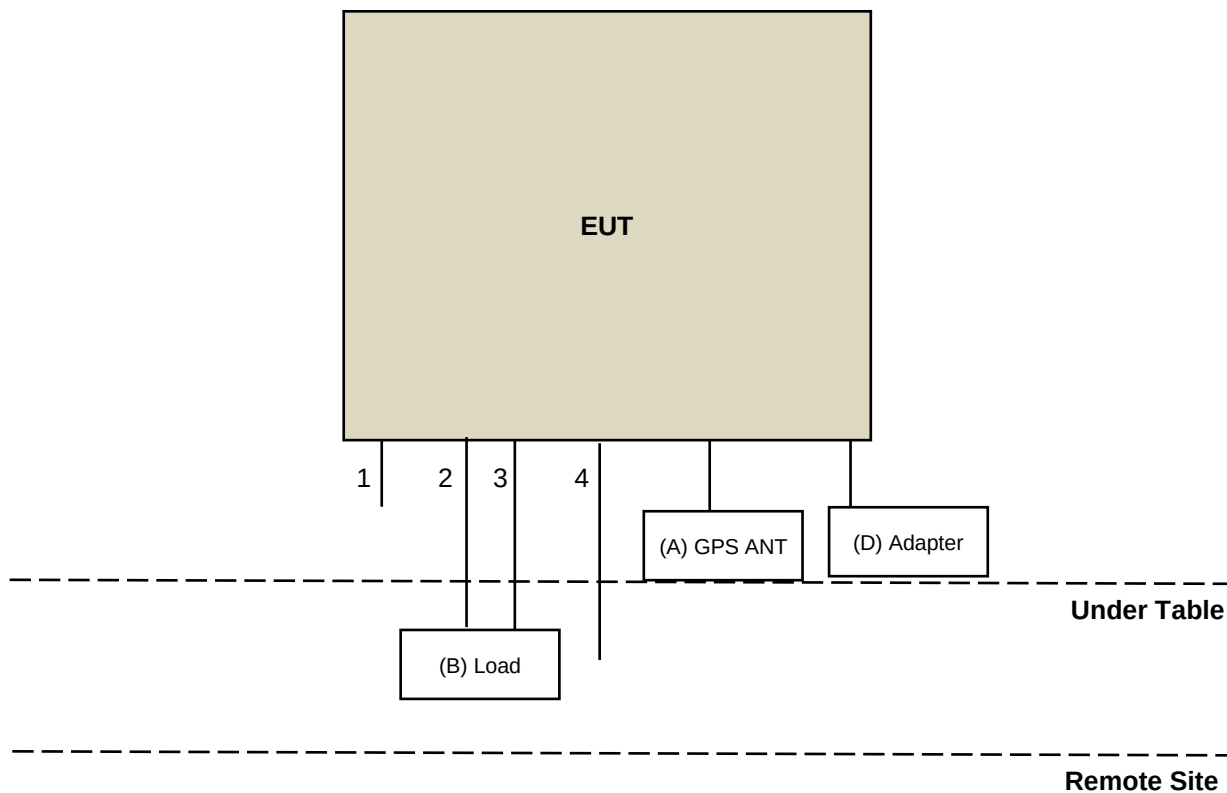
VHT40

3.6 Test Program Used and Operation Descriptions

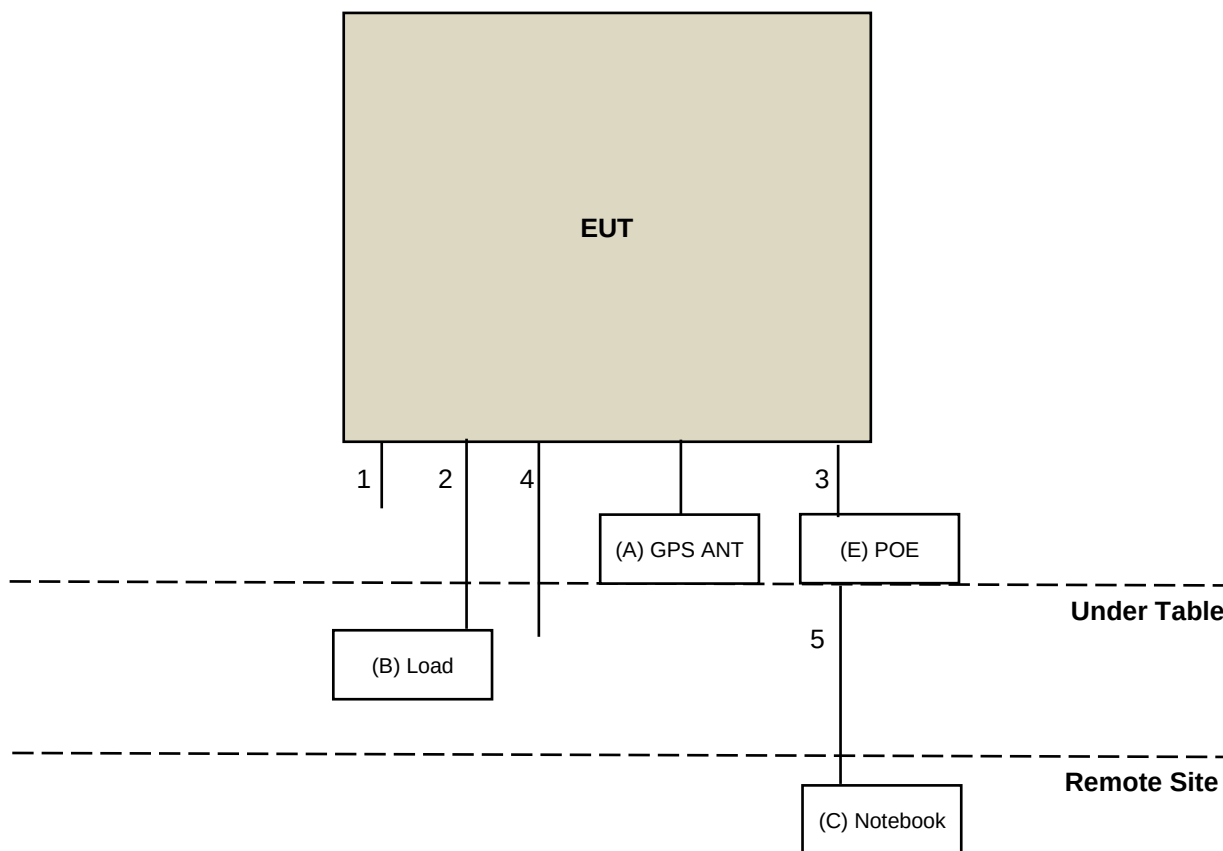
Controlling software Tera Term Version 4.79 has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices

Mode A



Mode B



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	GPS ANT	N/A	N/A	N/A	N/A	Supplied by applicant
B	Load	BV	LP-04	N/A	N/A	Provided by Lab
C	Laptop	Lenovo	TP00133C	N/A	N/A	Supplied by applicant
D	Adapter	Mass Power Electronics Inc.	NBS100A120600M2	N/A	N/A	Supplied by applicant
E	POE	Delta	ADH-90AR N	N/A	N/A	Supplied by applicant

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	Console Cable	1	0.25	N	0	Supplied by applicant
2	RJ-45 Cable	1	1.5	N	0	Provided by Lab
3	RJ-45 Cable	1	1.5	N	0	Provided by Lab
4	Fiber Cable	1	3	N	0	Provided by Lab
5	RJ-45 Cable	1	10	N	0	Provided by Lab

4 Test Instruments

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

4.1 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2024/5/29	2025/5/28
Peak Power Analyzer Keysight	8990B	MY51000538	2024/4/29	2025/4/28
Wideband Power Sensor Keysight	N1923A	MY58200003	2024/6/17	2025/6/16

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2025/2/21

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	101105	2025/2/25	2026/2/24
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: 2025/10/9

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	ESR3	102783	2024/12/17	2025/12/16
Fixed Attenuator STI	BNC5W10dB	PAD-COND2-01	2024/8/25	2025/8/24
LISN R&S	ESH2-Z5	100100	2024/3/6	2025/3/5
	ESH3-Z5	100312	2024/9/9	2025/9/8
RF Coaxial Cable Woken	5D-FB	Cable-cond2-01	2024/8/25	2025/8/24
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 2.
2. Tested Date: 2025/1/21

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	2024/12/30	2025/12/29
Loop Antenna TESEQ	HLA 6121	45745	2024/8/21	2025/8/20
MXE EMI Receiver Keysight	N9038B	MY60180019	2025/1/15	2026/1/14
Preamplifier EMCI	EMC330N	980782	2025/1/14	2026/1/13
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-500	201233	2025/1/14	2026/1/13
	EMCCFD400-NM-NM-3000	201235	2025/1/14	2026/1/13
	EMCCFD400-NM-NM-9000	201236(with PAD)	2025/1/14	2026/1/13
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: 2025/2/13

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	2024/12/30	2025/12/29
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	2025/1/15	2026/1/14
Preamplifier EMCI	EMC118A45SE	980808	2024/12/26	2025/12/25
	EMC184045SE	980788	2025/1/14	2026/1/13
RF Coaxial Cable EMCI	EMC101G-KM-KM-2000	201254	2025/1/14	2026/1/13
	EMC101G-KM-KM-3000	201258	2025/1/14	2026/1/13
	EMC101G-KM-KM-5000	201261	2025/1/14	2026/1/13
	EMC104-SM-SM-1000	210102	2025/1/14	2026/1/13
	EMC104-SM-SM-3000	201231	2025/1/14	2026/1/13
	EMC104-SM-SM-9000	201243	2025/1/14	2026/1/13
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: 2025/2/10

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

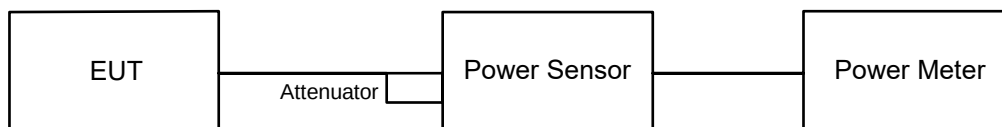
Notes:

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



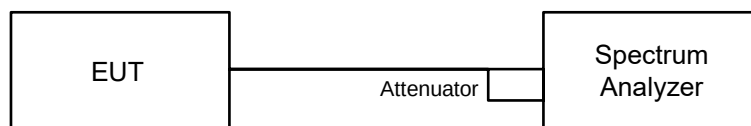
6.1.2 Test Procedure

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



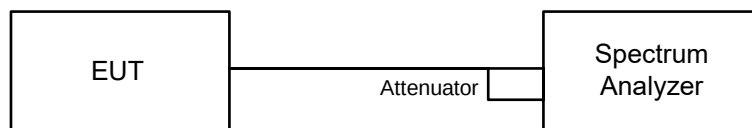
6.2.2 Test Procedure

- Measure the duty cycle (x).
- Set instrument center frequency to DTS channel center frequency.
- Set 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 $\geq 2 \times \text{span/RBW}$.
- 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.

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

6.3 6 dB Bandwidth

6.3.1 Test Setup

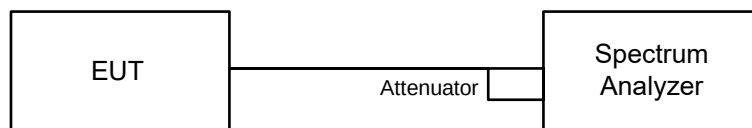


6.3.2 Test Procedure

- a. Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz.
- b. Set the VBW $\geq [3 \times \text{RBW}]$.
- c. Detector = peak.
- d. Trace mode = max-hold.
- e. Sweep = No faster than coupled (auto) time.
- f. Allow the trace to stabilize.
- g. 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

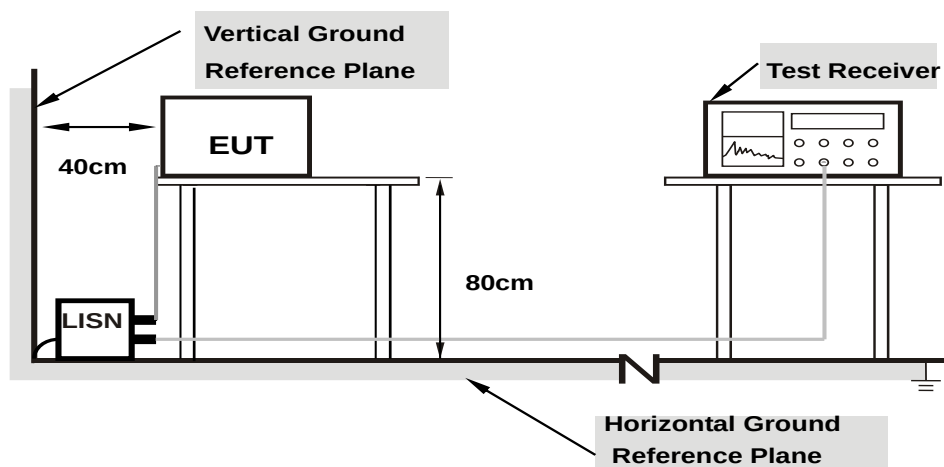
- Set instrument center frequency to DTS channel center frequency.
- Set the span to ≥ 1.5 times the DTS bandwidth.
- Set the RBW = 100 kHz.
- Set the VBW ≥ 300 kHz.
- Detector = peak.
- Sweep time = No faster than coupled (auto) time.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum PSD 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.
- Set RBW = 100 kHz.
- Set VBW ≥ 300 kHz.
- Detector = peak.
- Sweep = 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.

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

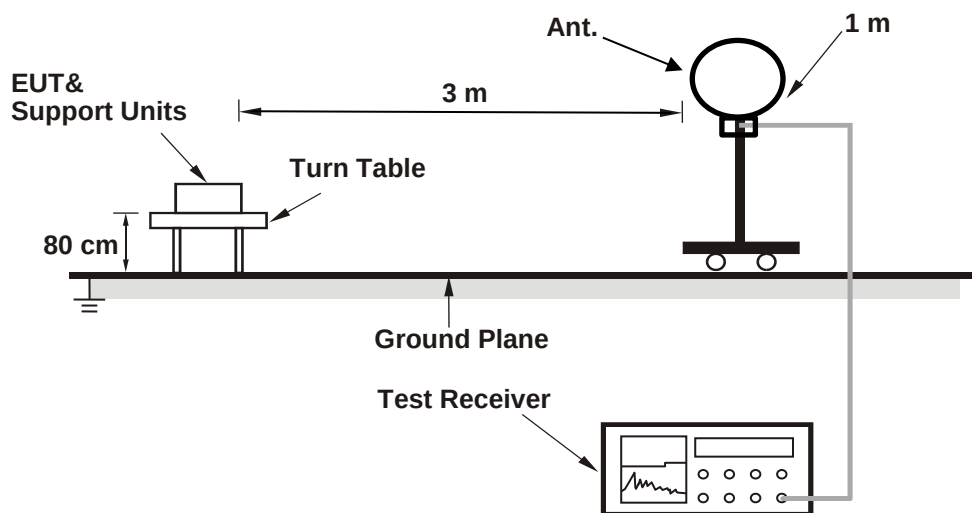
- Exploratory ac power-line conducted emission measurements: The EUT shall be operated on the mid channel and in the mode with highest output power unless the fundamental operates in the AC power-line emission test range then the EUT shall be operated in the range of typical modes of operation.
- The 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.

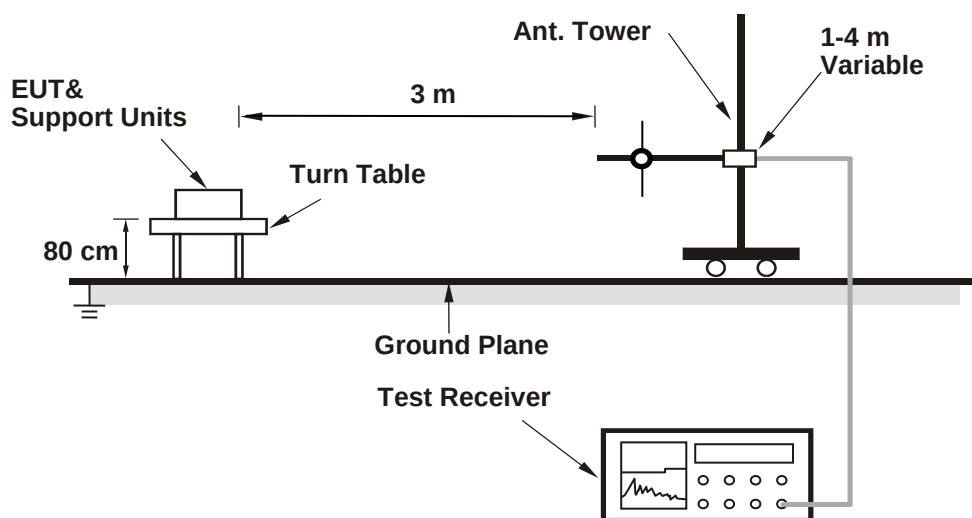
6.6 Unwanted Emissions below 1 GHz

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

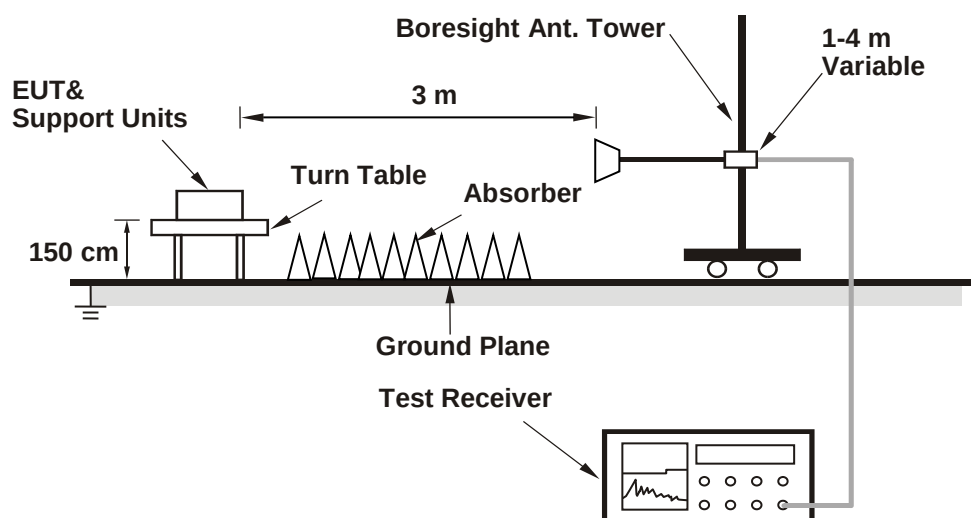
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the 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(QP) detect function, Average(AV) detect function, Peak(PK) detect function and specified bandwidth with maximum hold mode when the test frequencies less than or equal to 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.
- 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:	Ivan Tseng
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802.11b

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
1	2412	59.841	17.77	30	Pass
6	2437	65.917	18.19	30	Pass
11	2462	66.681	18.24	30	Pass
12	2467	42.267	16.26	30	Pass
13	2472	18.493	12.67	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)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
1	2412	48.306	16.84	30	Pass
6	2437	66.069	18.20	30	Pass
11	2462	38.637	15.87	30	Pass
12	2467	26.062	14.16	30	Pass
13	2472	11.614	10.65	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)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
1	2412	33.806	15.29	30	Pass
6	2437	67.298	18.28	30	Pass
11	2462	26.303	14.20	30	Pass
12	2467	20.654	13.15	30	Pass
13	2472	8.831	9.46	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)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
3	2422	15.922	12.02	30	Pass
6	2437	36.308	15.60	30	Pass
9	2452	20.701	13.16	30	Pass
10	2457	19.724	12.95	30	Pass
11	2462	16.482	12.17	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)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
1	2412	34.041	15.32	30	Pass
6	2437	67.92	18.32	30	Pass
11	2462	26.424	14.22	30	Pass
12	2467	20.749	13.17	30	Pass
13	2472	8.913	9.50	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)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
3	2422	16.032	12.05	30	Pass
6	2437	36.475	15.62	30	Pass
9	2452	20.893	13.20	30	Pass
10	2457	19.815	12.97	30	Pass
11	2462	16.596	12.20	30	Pass

Note: The antenna gain is 4.83 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:	Ivan Tseng
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802.11b

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-13.58	8	Pass
6	2437	-13.13	8	Pass
11	2462	-13.01	8	Pass
12	2467	-15.03	8	Pass
13	2472	-18.68	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 w/o Duty Factor (dBm/3kHz)	Duty Factor (dB)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-14.54	0.46	-14.54	8	Pass
6	2437	-13.26	0.46	-13.26	8	Pass
11	2462	-15.42	0.46	-15.42	8	Pass
12	2467	-17.14	0.46	-17.14	8	Pass
13	2472	-20.7	0.46	-20.70	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 w/o Duty Factor (dBm/3kHz)	Duty Factor (dB)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-18.01	0.21	-18.01	8	Pass
6	2437	-15.03	0.21	-15.03	8	Pass
11	2462	-19.17	0.21	-19.17	8	Pass
12	2467	-19.98	0.21	-19.98	8	Pass
13	2472	-23.37	0.21	-23.37	8	Pass

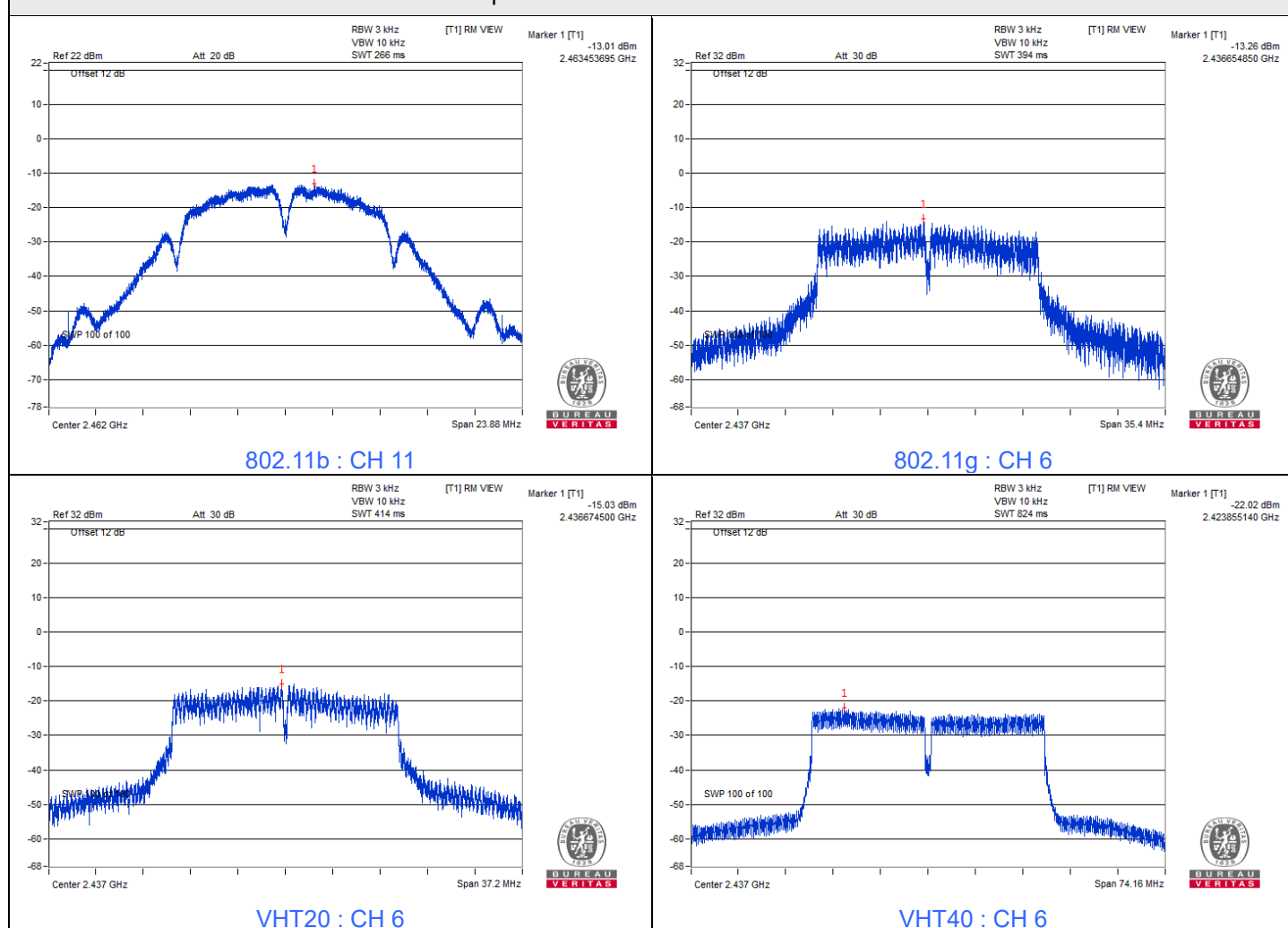
Note: The antenna gain is 4.83 dBi < 6 dBi, so the power density limit shall not be reduced.

VHT40

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)	Duty Factor (dB)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
3	2422	-25.6	0.45	-25.60	8	Pass
6	2437	-22.02	0.45	-22.02	8	Pass
9	2452	-24.31	0.45	-24.31	8	Pass
10	2457	-24.56	0.45	-24.56	8	Pass
11	2462	-25.41	0.45	-25.41	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:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Ivan Tseng
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802.11b

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	8.79	0.5	Pass
6	2437	9.23	0.5	Pass
11	2462	9.15	0.5	Pass
12	2467	8.77	0.5	Pass
13	2472	8.81	0.5	Pass

802.11g

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	16.35	0.5	Pass
6	2437	16.5	0.5	Pass
11	2462	16.32	0.5	Pass
12	2467	16.28	0.5	Pass
13	2472	16.44	0.5	Pass

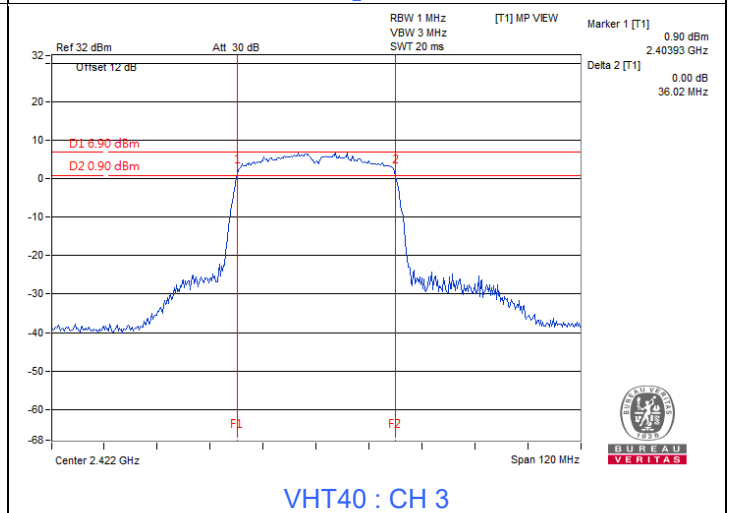
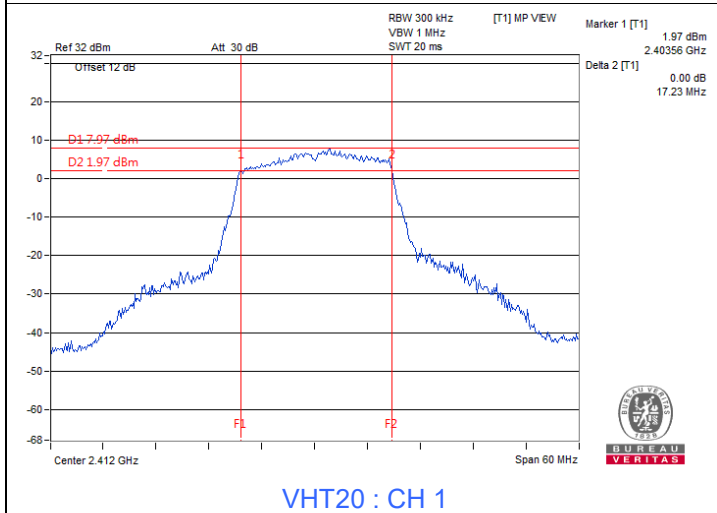
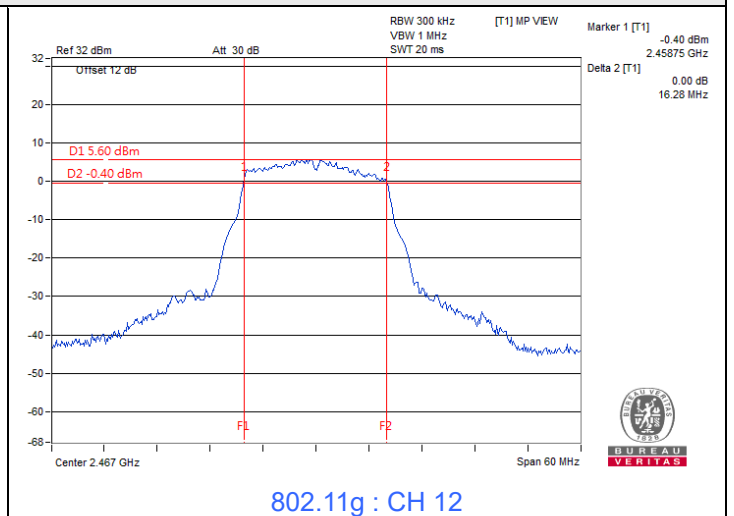
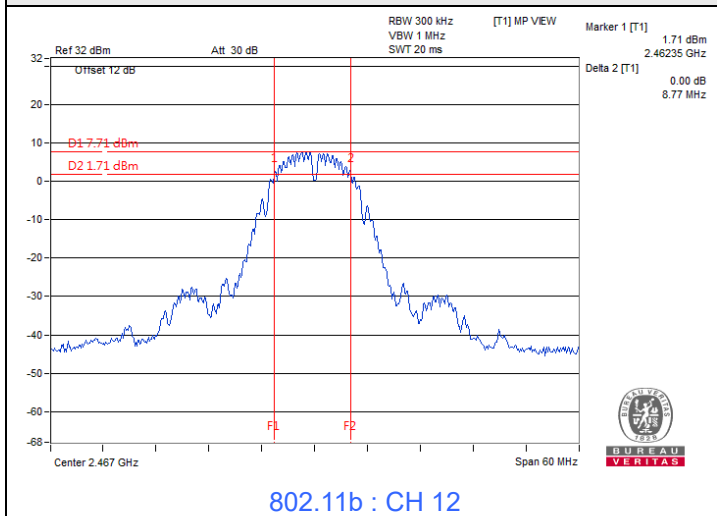
VHT20

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	17.23	0.5	Pass
6	2437	17.71	0.5	Pass
11	2462	17.26	0.5	Pass
12	2467	17.43	0.5	Pass
13	2472	17.51	0.5	Pass

VHT40

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
3	2422	36.02	0.5	Pass
6	2437	37.01	0.5	Pass
9	2452	36.55	0.5	Pass
10	2457	36.09	0.5	Pass
11	2462	36.19	0.5	Pass

Spectrum Plot of Minimum Value

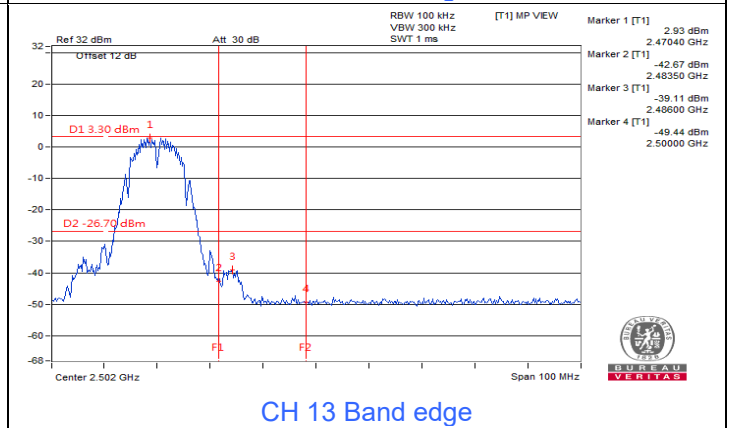
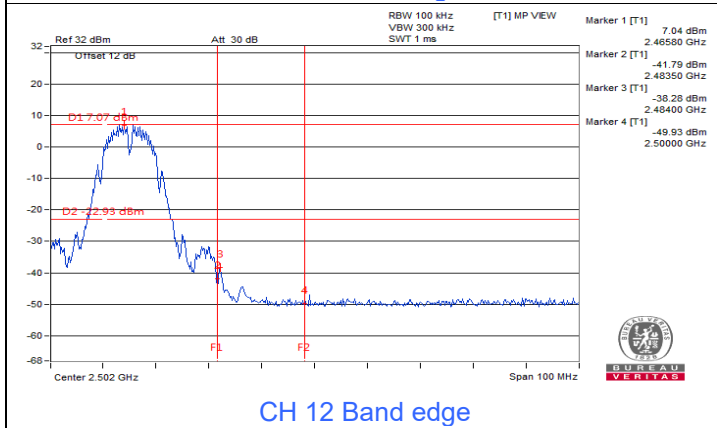
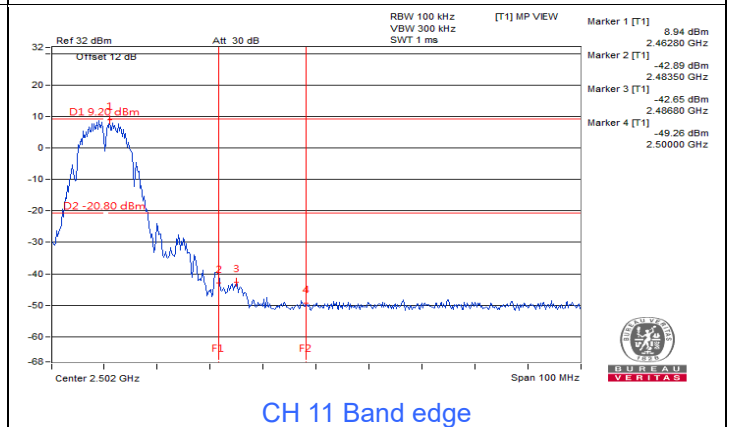
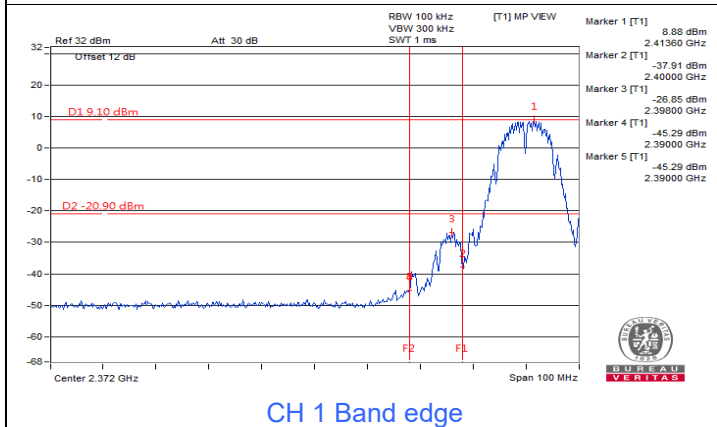
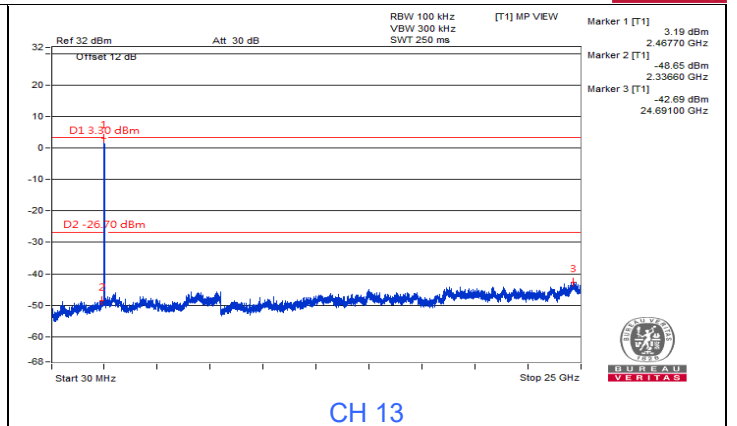
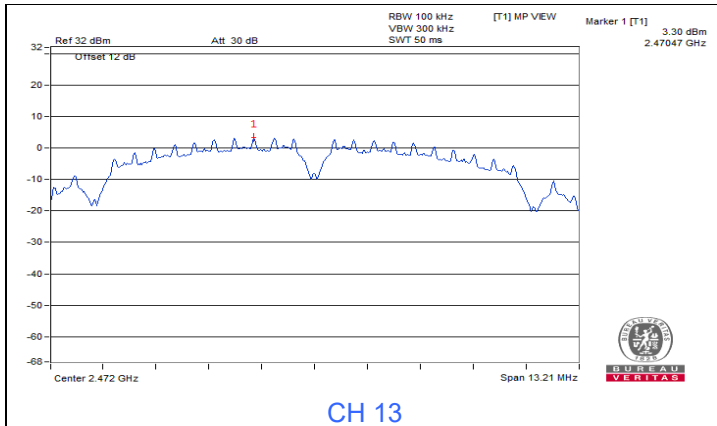


7.4 Conducted Out of Band Emissions

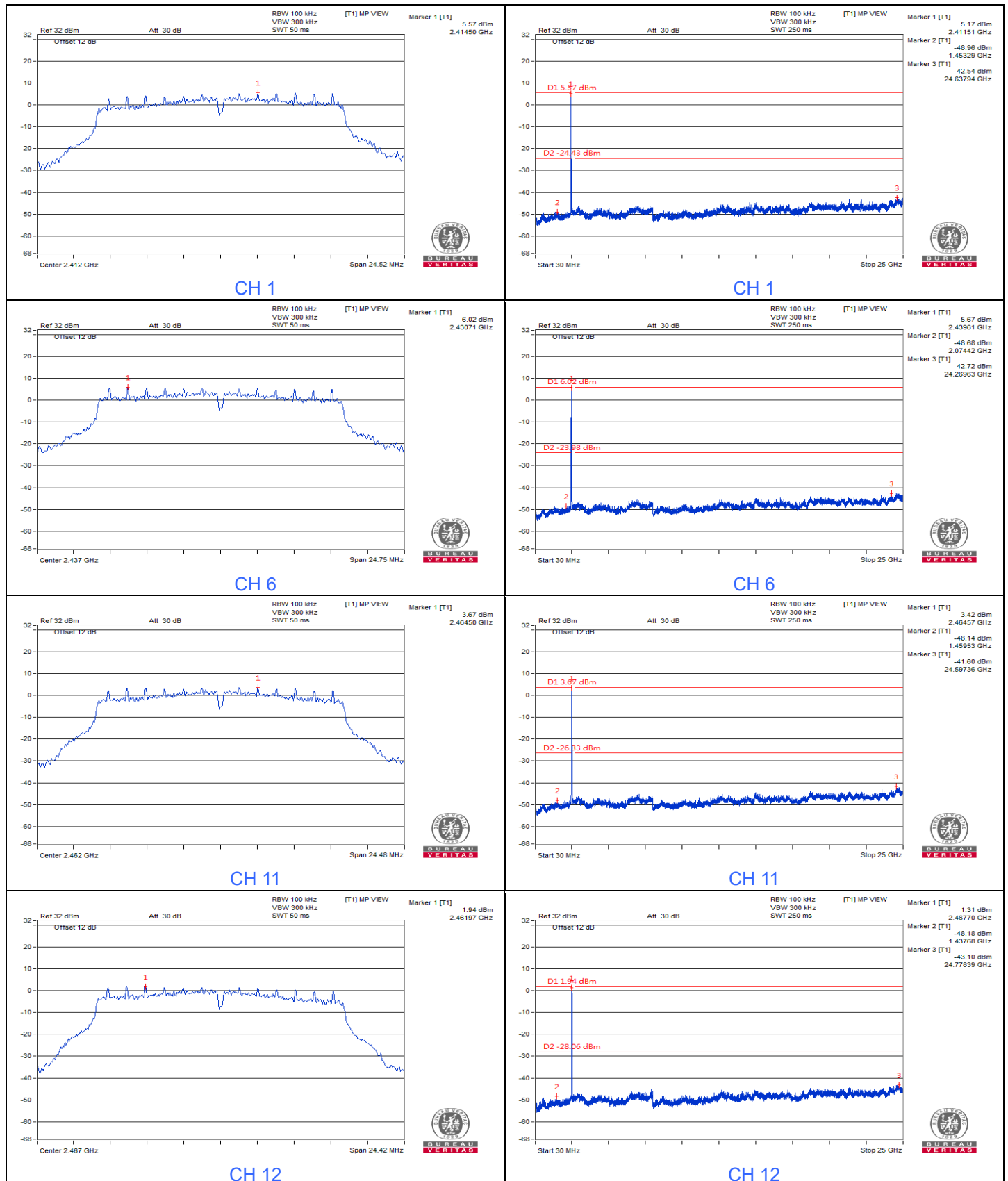
Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Ivan Tseng
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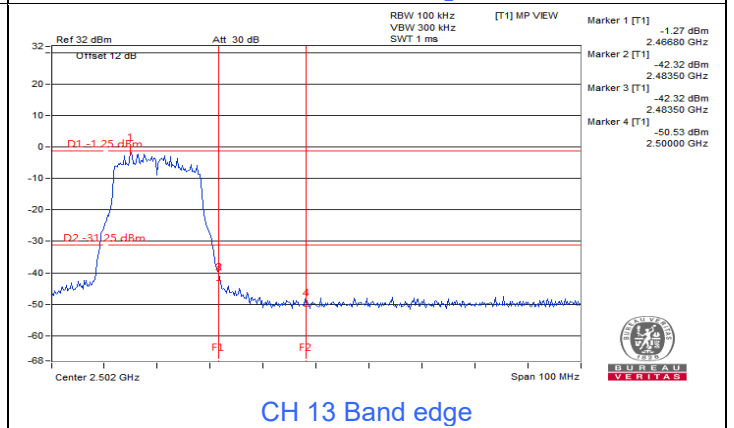
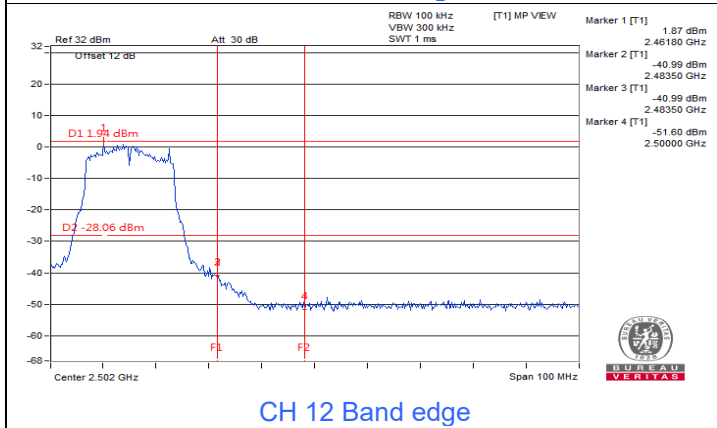
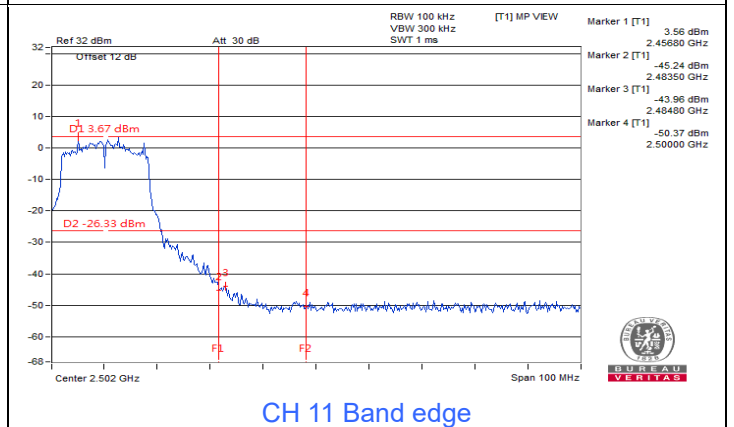
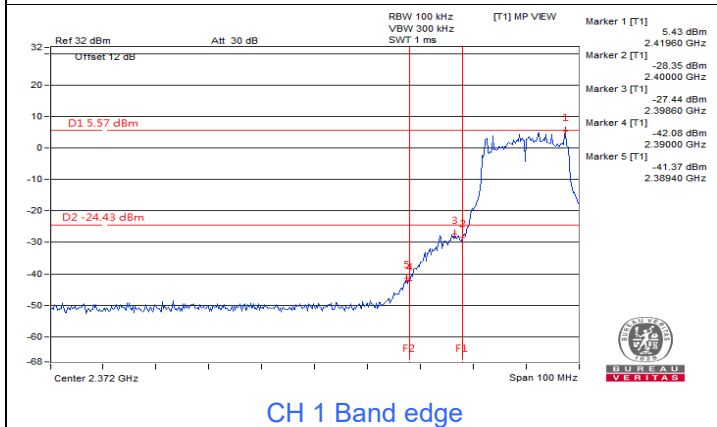
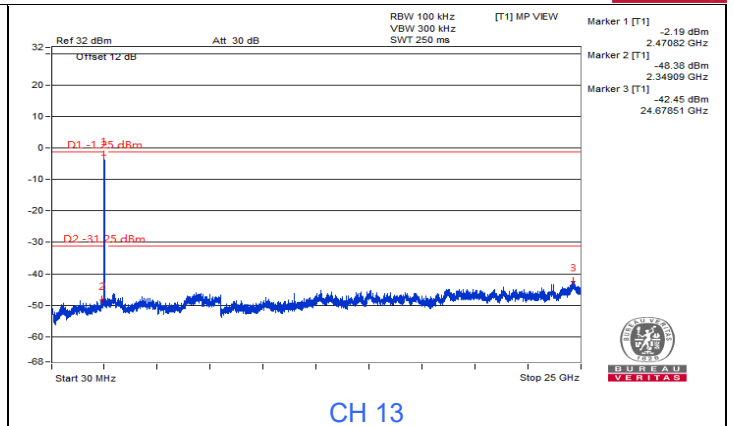
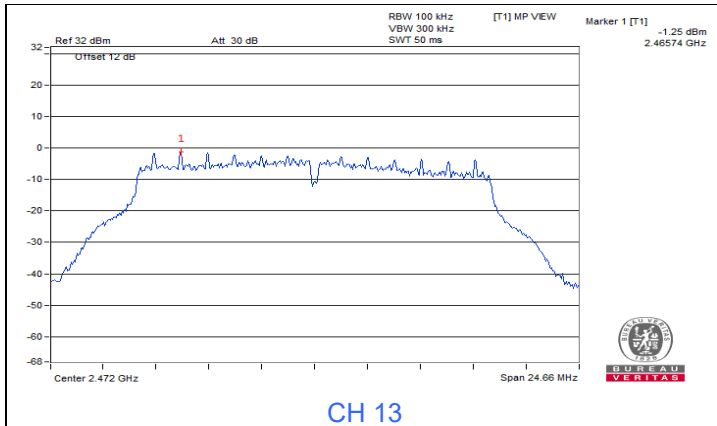
802.11b



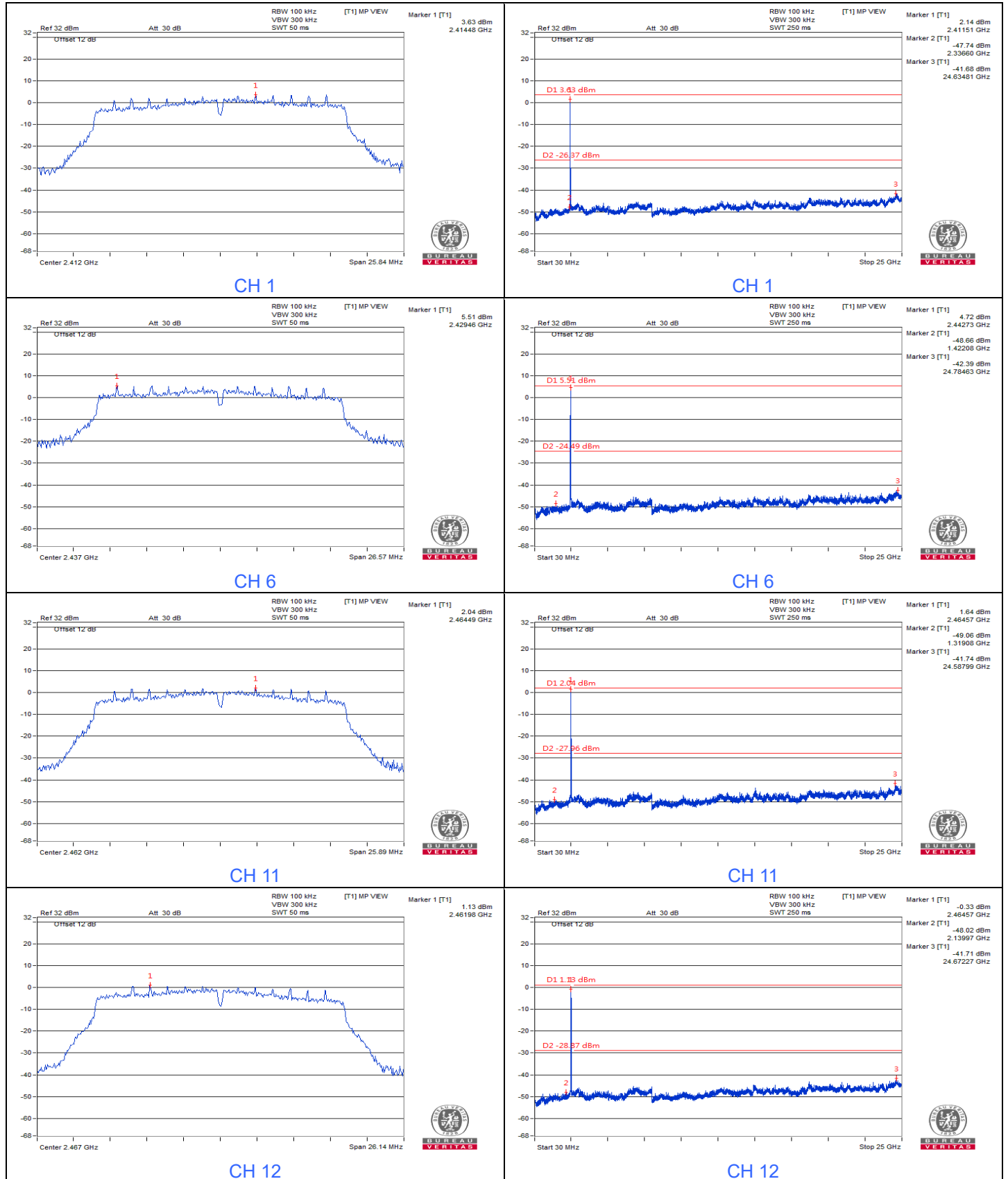


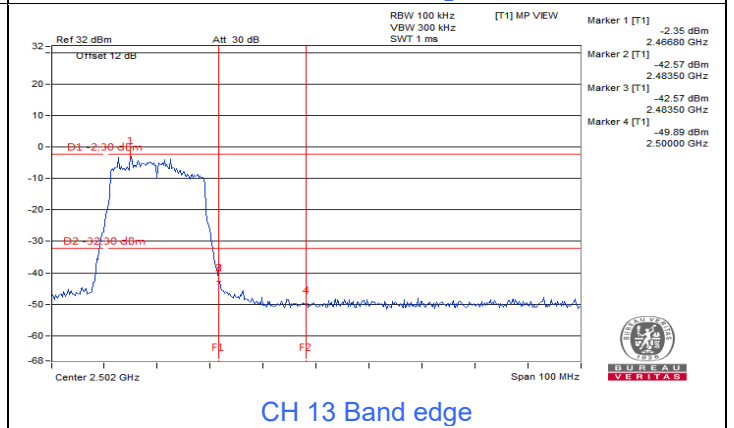
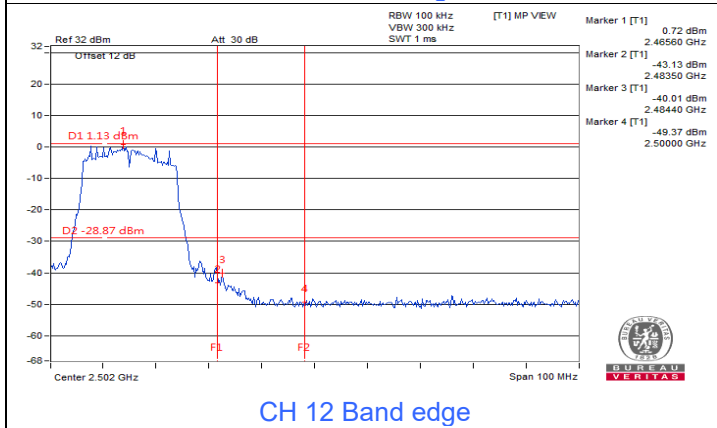
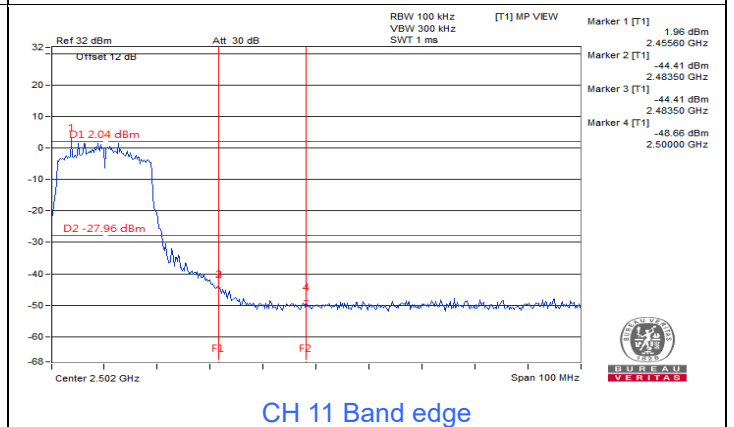
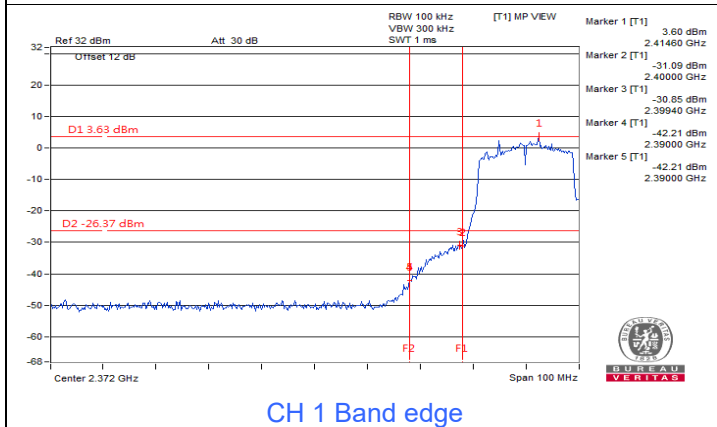
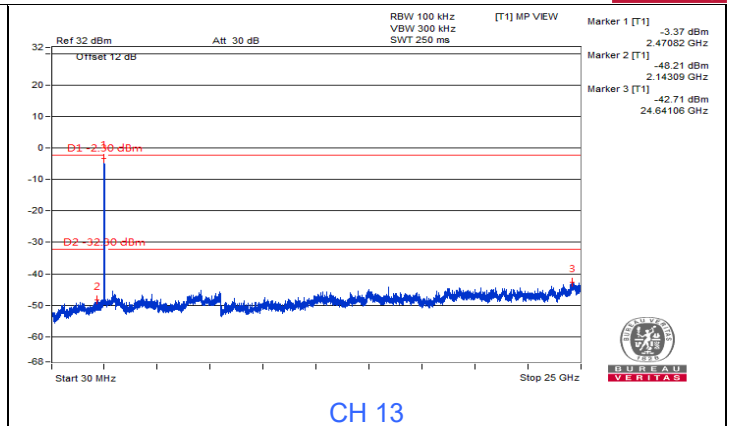
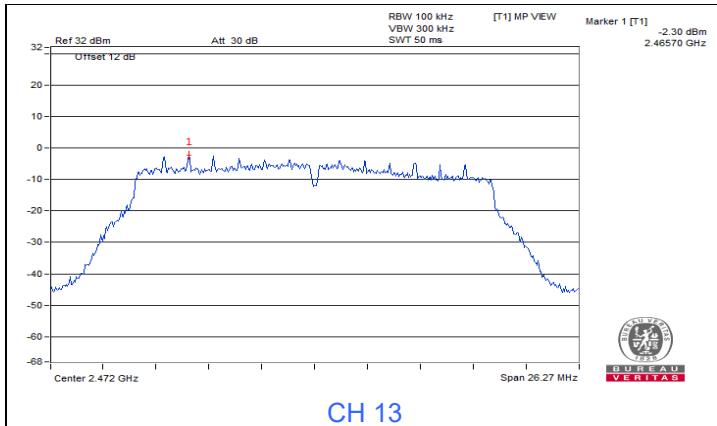
802.11g



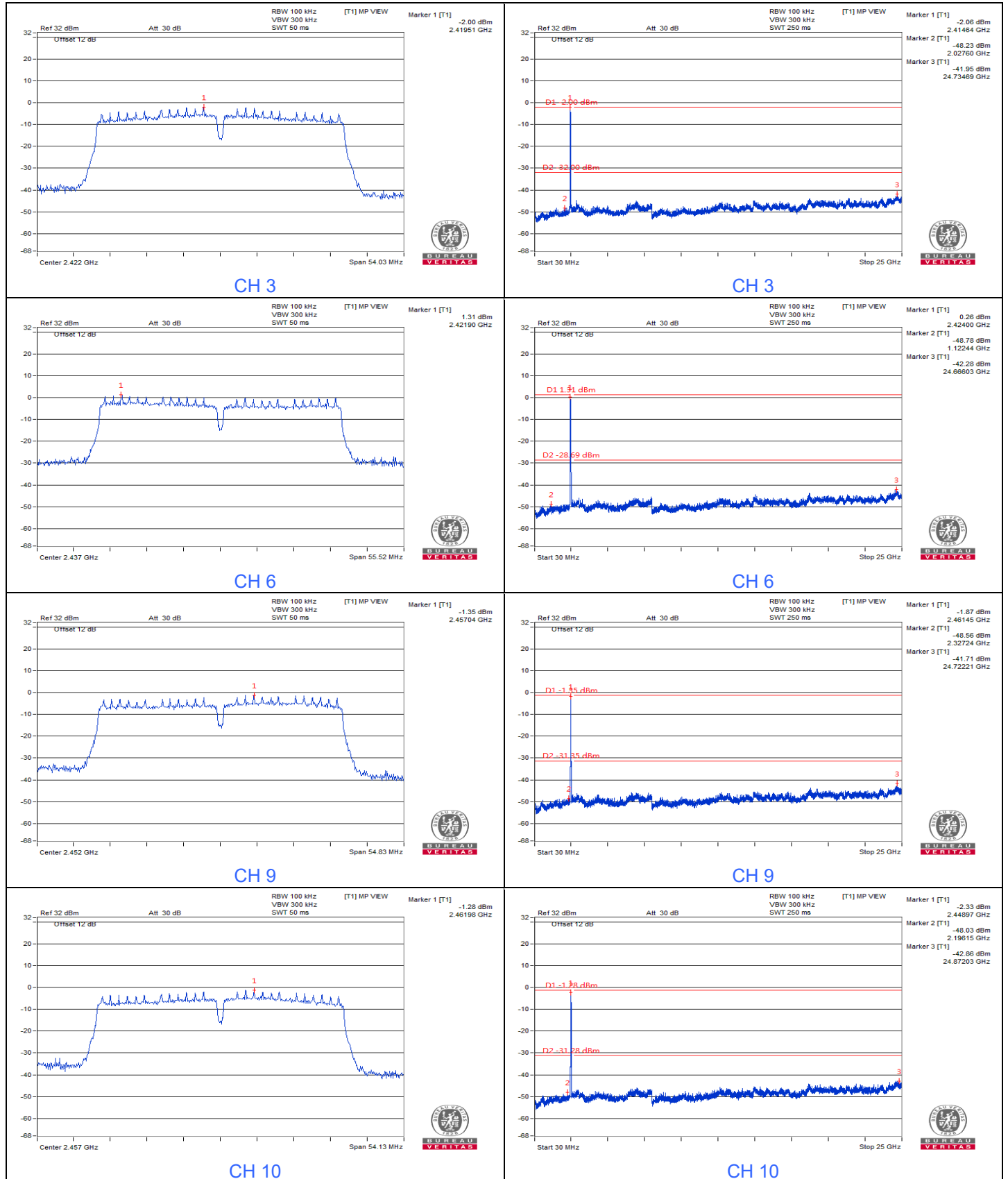


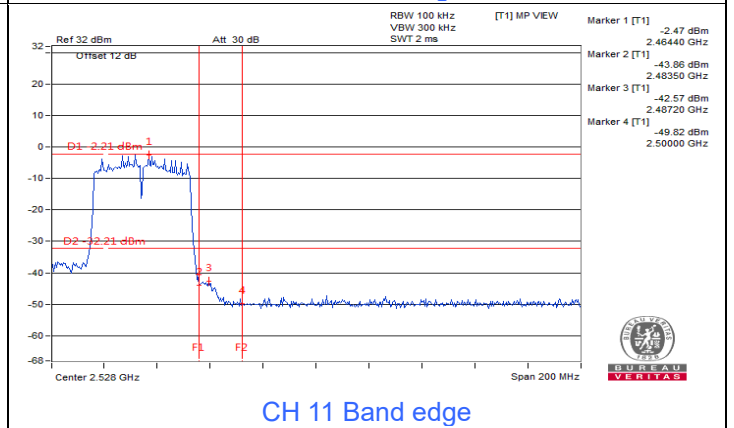
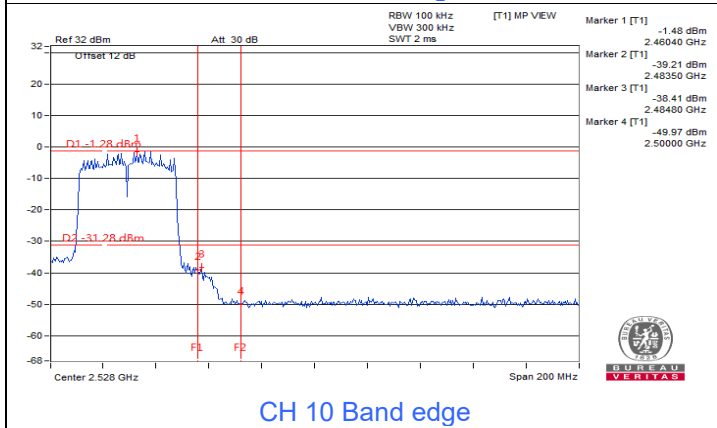
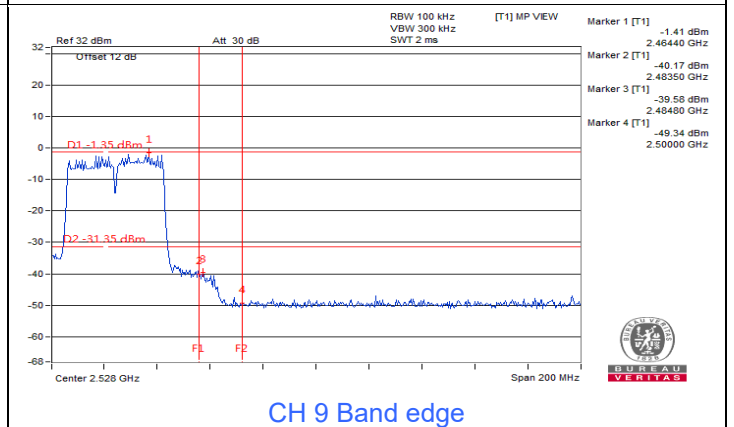
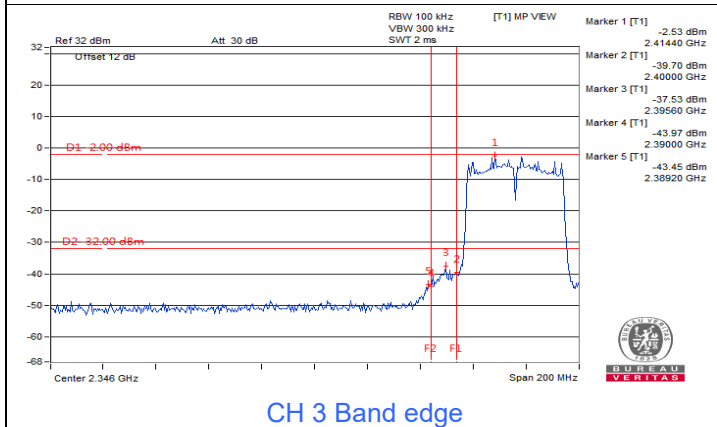
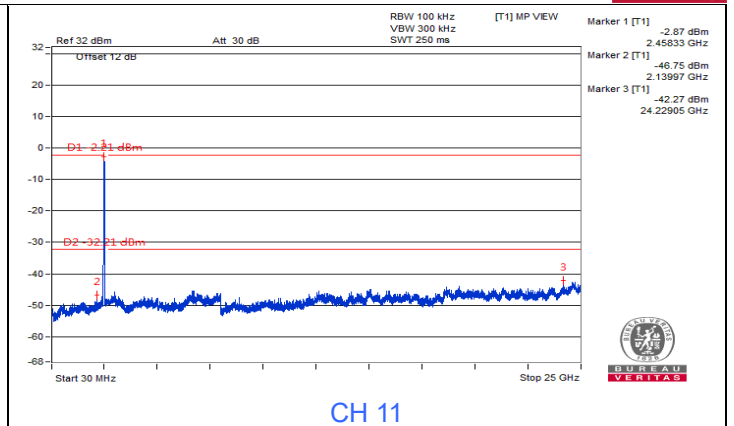
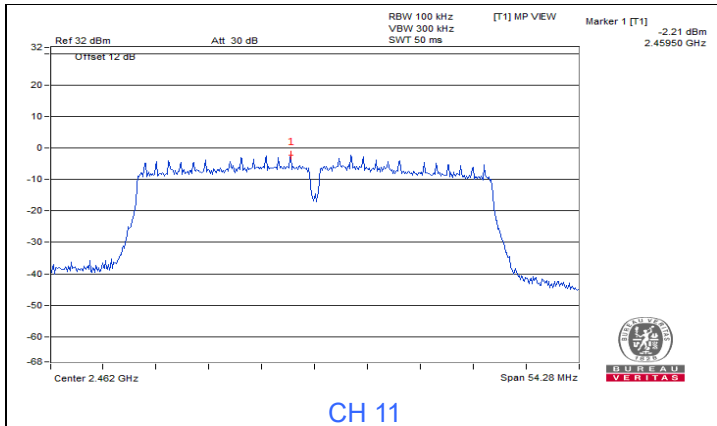
VHT20





VHT40





7.5 AC Power Conducted Emissions

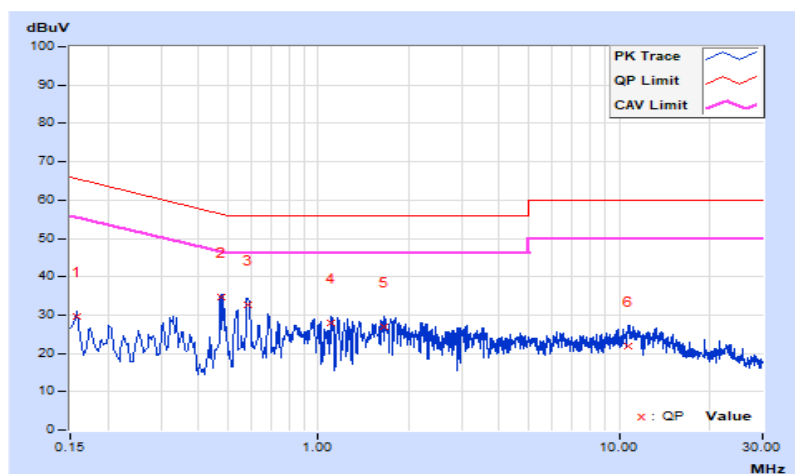
Mode A

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	23 °C, 67 % RH
Tested By	Adair Peng		

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	0.15800	10.10	19.54	8.77	29.64	18.87	65.57	55.57	-35.93	-36.70
2	0.47400	10.11	24.44	16.82	34.55	26.93	56.44	46.44	-21.89	-19.51
3	0.58411	10.12	22.70	17.82	32.82	27.94	56.00	46.00	-23.18	-18.06
4	1.09800	10.14	17.73	5.23	27.87	15.37	56.00	46.00	-28.13	-30.63
5	1.66600	10.17	16.88	5.23	27.05	15.40	56.00	46.00	-28.95	-30.60
6	10.77800	10.33	11.50	2.58	21.83	12.91	60.00	50.00	-38.17	-37.09

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

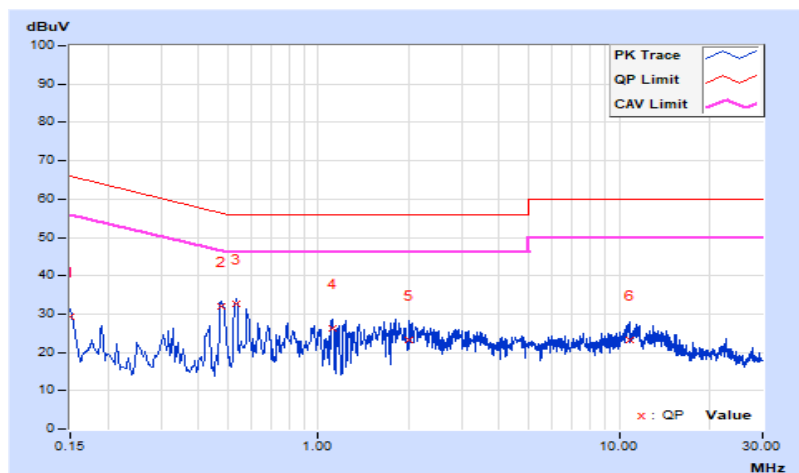


RF Mode	VHT20	Channel	CH 6 : 2437 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67 % RH
Tested By	Adair Peng		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.13	19.12	12.52	29.25	22.65	66.00	56.00	-36.75	-33.35
2	0.47400	10.14	21.97	14.35	32.11	24.49	56.44	46.44	-24.33	-21.95
3	0.53400	10.15	22.64	17.59	32.79	27.74	56.00	46.00	-23.21	-18.26
4	1.11000	10.18	16.18	6.86	26.36	17.04	56.00	46.00	-29.64	-28.96
5	2.01400	10.22	12.93	5.79	23.15	16.01	56.00	46.00	-32.85	-29.99
6	10.89000	10.40	12.67	4.43	23.07	14.83	60.00	50.00	-36.93	-35.17

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



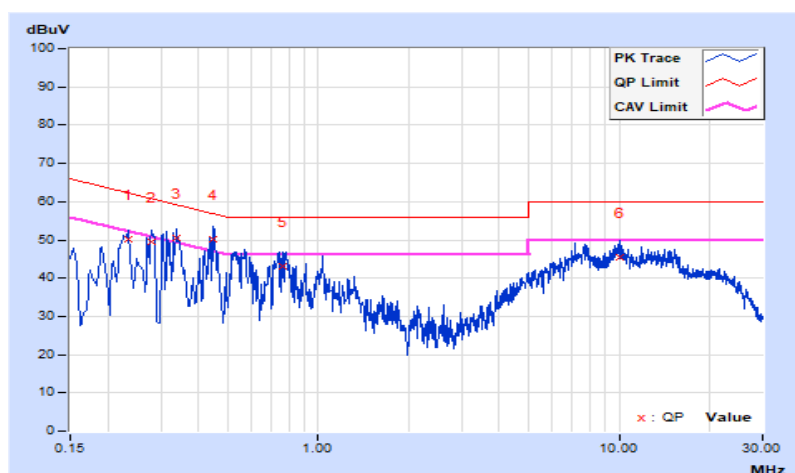
Mode B

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	23 °C, 67 % RH
Tested By	Adair Peng		

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	0.23351	10.11	39.97	33.79	50.08	43.90	62.32	52.32	-12.24	-8.42
2	0.27800	10.11	39.45	29.45	49.56	39.56	60.88	50.88	-11.32	-11.32
3	0.33800	10.11	40.45	32.56	50.56	42.67	59.25	49.25	-8.69	-6.58
4	0.45000	10.11	40.05	25.97	50.16	36.08	56.88	46.88	-6.72	-10.80
5	0.75800	10.13	33.05	17.48	43.18	27.61	56.00	46.00	-12.82	-18.39
6	10.04200	10.31	35.08	28.32	45.39	38.63	60.00	50.00	-14.61	-11.37

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

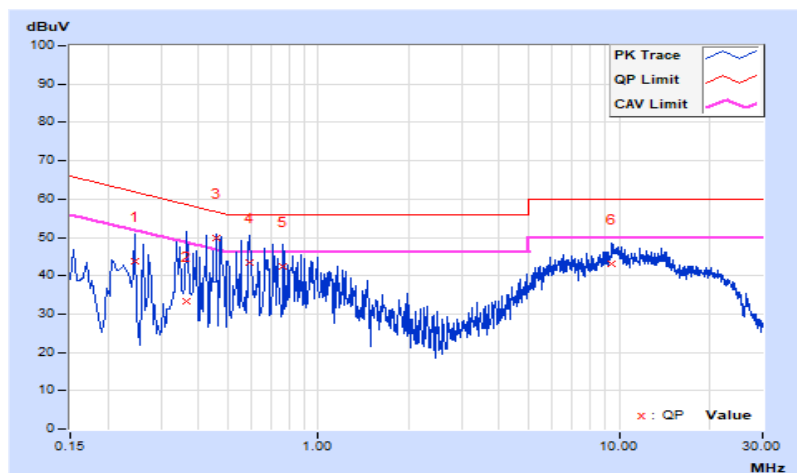


RF Mode	VHT20	Channel	CH 6 : 2437 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67 % RH
Tested By	Adair Peng		

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	0.24600	10.14	33.50	19.59	43.64	29.73	61.89	51.89	-18.25	-22.16
2	0.36600	10.14	23.13	17.70	33.27	27.84	58.59	48.59	-25.32	-20.75
3	0.45800	10.14	39.55	25.38	49.69	35.52	56.73	46.73	-7.04	-11.21
4	0.59000	10.15	33.35	23.41	43.50	33.56	56.00	46.00	-12.50	-12.44
5	0.76600	10.16	32.32	19.27	42.48	29.43	56.00	46.00	-13.52	-16.57
6	9.45000	10.36	32.80	24.65	43.16	35.01	60.00	50.00	-16.84	-14.99

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

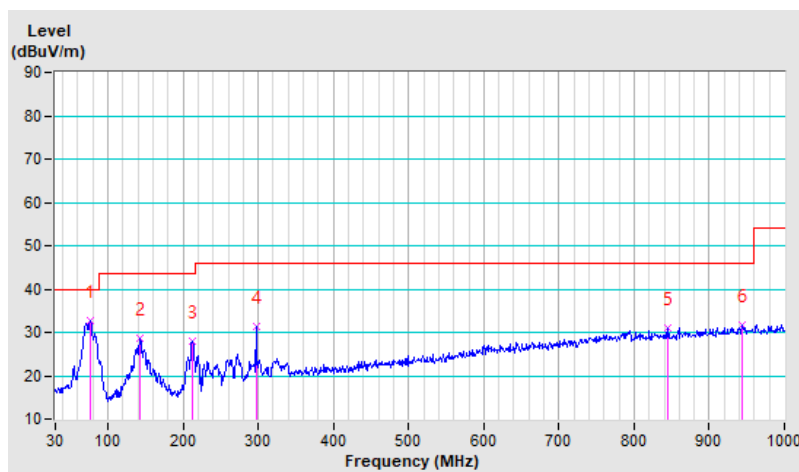
Mode A

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	23 °C, 67 % RH
Tested By	Greg Lin		

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	75.59	32.7 QP	40.0	-7.3	1.00 H	148	49.6	-16.9
2	142.52	28.5 QP	43.5	-15.0	1.25 H	310	41.4	-12.9
3	212.36	28.1 QP	43.5	-15.4	1.50 H	253	44.4	-16.3
4	296.75	31.4 QP	46.0	-14.6	1.25 H	191	43.7	-12.3
5	844.80	31.0 QP	46.0	-15.0	1.00 H	334	32.2	-1.2
6	943.74	31.8 QP	46.0	-14.2	1.00 H	13	31.5	0.3

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.

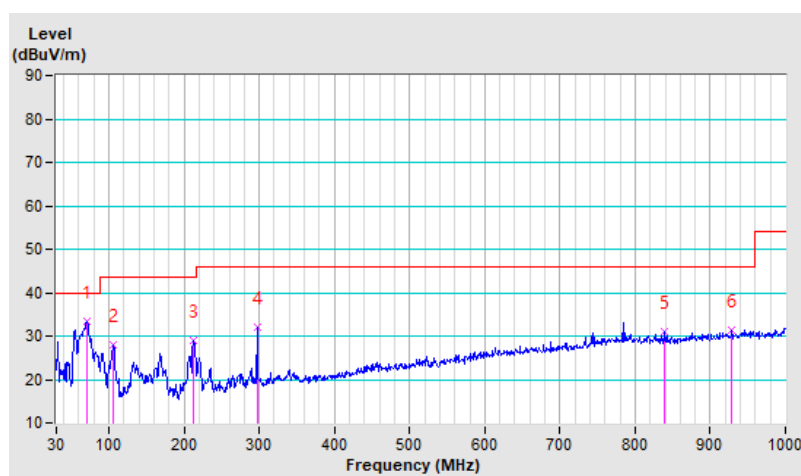


RF Mode	VHT20	Channel	CH 6 : 2437 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67 % RH
Tested By	Greg Lin		

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	69.77	33.4 QP	40.0	-6.6	1.25 V	221	48.9	-15.5
2	105.66	28.0 QP	43.5	-15.5	1.00 V	182	44.5	-16.5
3	212.36	28.9 QP	43.5	-14.6	1.50 V	223	45.2	-16.3
4	296.75	31.9 QP	46.0	-14.1	1.00 V	292	44.2	-12.3
5	838.98	31.1 QP	46.0	-14.9	1.00 V	125	32.3	-1.2
6	928.22	31.4 QP	46.0	-14.6	1.25 V	28	31.4	0.0

Remarks:

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



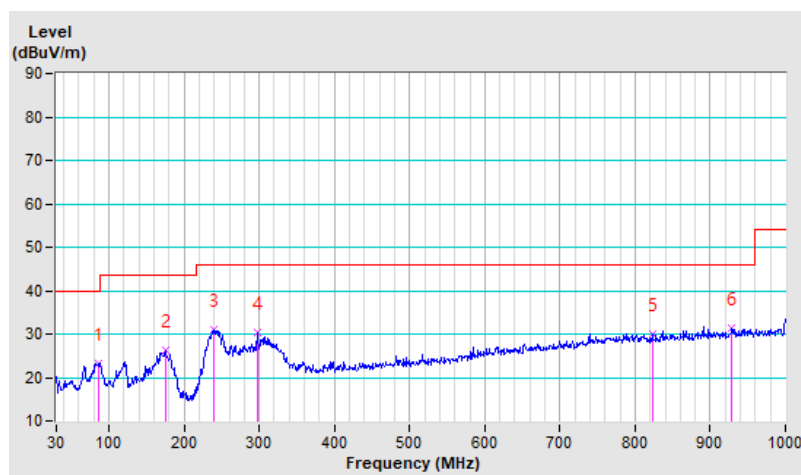
Mode B

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	23 °C, 67 % RH
Tested By	Greg Lin		

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	86.26	23.1 QP	40.0	-16.9	1.00 H	281	42.0	-18.9
2	174.53	26.3 QP	43.5	-17.2	1.25 H	256	39.8	-13.5
3	238.55	31.0 QP	46.0	-15.0	1.00 H	294	45.4	-14.4
4	296.75	30.4 QP	46.0	-15.6	1.25 H	211	42.8	-12.4
5	822.49	29.9 QP	46.0	-16.1	1.50 H	339	31.3	-1.4
6	928.22	31.4 QP	46.0	-14.6	1.00 H	139	31.1	0.3

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.

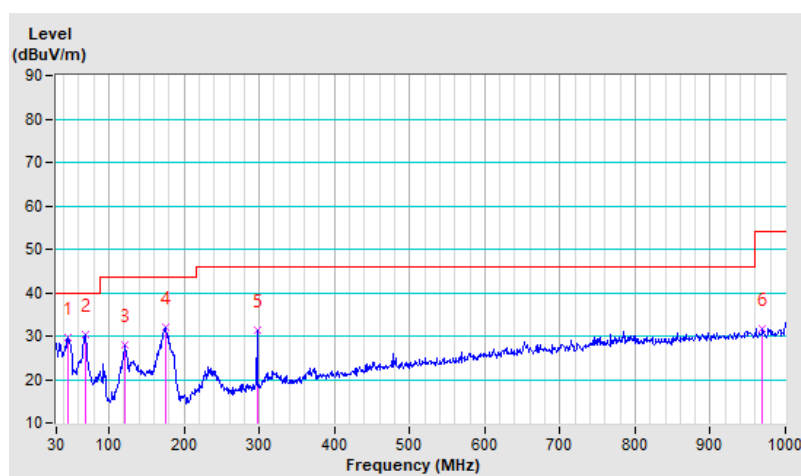


RF Mode	VHT20	Channel	CH 6 : 2437 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67 % RH
Tested By	Greg Lin		

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	44.55	29.7 QP	40.0	-10.3	1.00 V	317	42.8	-13.1
2	67.83	30.2 QP	40.0	-9.8	1.50 V	244	45.3	-15.1
3	120.21	28.0 QP	43.5	-15.5	1.25 V	209	42.9	-14.9
4	174.53	32.0 QP	43.5	-11.5	1.00 V	19	45.6	-13.6
5	296.75	31.3 QP	46.0	-14.7	1.25 V	334	43.6	-12.3
6	968.96	31.8 QP	54.0	-22.2	1.00 V	275	31.3	0.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit 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	23 °C, 67 % RH
Tested By	Karl Lee		

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	60.3 PK	74.0	-13.7	1.78 H	285	28.5	31.8
2	2390.00	51.9 AV	54.0	-2.1	1.78 H	285	20.1	31.8
3	*2412.00	104.7 PK			1.78 H	285	72.9	31.8
4	*2412.00	101.8 AV			1.78 H	285	70.0	31.8
5	4824.00	49.6 PK	74.0	-24.4	1.84 H	216	46.6	3.0
6	4824.00	35.7 AV	54.0	-18.3	1.84 H	216	32.7	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	59.2 PK	74.0	-14.8	1.33 V	194	27.4	31.8
2	2390.00	49.9 AV	54.0	-4.1	1.33 V	194	18.1	31.8
3	*2412.00	101.5 PK			1.33 V	194	69.7	31.8
4	*2412.00	97.8 AV			1.33 V	194	66.0	31.8
5	4824.00	49.4 PK	74.0	-24.6	2.03 V	119	46.4	3.0
6	4824.00	35.4 AV	54.0	-18.6	2.03 V	119	32.4	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 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	23 °C, 67 % RH
Tested By	Karl Lee		

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	105.3 PK			1.93 H	284	73.5	31.8
2	*2437.00	102.5 AV			1.93 H	284	70.7	31.8
3	4874.00	49.3 PK	74.0	-24.7	1.77 H	216	46.3	3.0
4	4874.00	35.5 AV	54.0	-18.5	1.77 H	216	32.5	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	102.2 PK			1.09 V	196	70.4	31.8
2	*2437.00	99.5 AV			1.09 V	196	67.7	31.8
3	4874.00	49.5 PK	74.0	-24.5	2.03 V	125	46.5	3.0
4	4874.00	35.7 AV	54.0	-18.3	2.03 V	125	32.7	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	23 °C, 67 % RH
Tested By	Karl Lee		

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	105.1 PK			1.89 H	283	73.2	31.9
2	*2462.00	102.2 AV			1.89 H	283	70.3	31.9
3	2483.50	60.4 PK	74.0	-13.6	1.89 H	283	28.5	31.9
4	2483.50	53.8 AV	54.0	-0.2	1.89 H	283	21.9	31.9
5	4924.00	49.1 PK	74.0	-24.9	1.82 H	216	46.1	3.0
6	4924.00	35.3 AV	54.0	-18.7	1.82 H	216	32.3	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	*2462.00	101.9 PK			1.14 V	195	70.0	31.9
2	*2462.00	99.1 AV			1.14 V	195	67.2	31.9
3	2483.50	60.9 PK	74.0	-13.1	1.14 V	195	29.0	31.9
4	2483.50	48.9 AV	54.0	-5.1	1.14 V	195	17.0	31.9
5	4924.00	49.3 PK	74.0	-24.7	2.03 V	121	46.3	3.0
6	4924.00	35.4 AV	54.0	-18.6	2.03 V	121	32.4	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 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	23 °C, 67 % RH
Tested By	Karl Lee		

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	103.4 PK			1.89 H	284	71.5	31.9
2	*2467.00	100.4 AV			1.89 H	284	68.5	31.9
3	2483.50	63.3 PK	74.0	-10.7	1.89 H	284	31.4	31.9
4	2483.50	53.8 AV	54.0	-0.2	1.89 H	284	21.9	31.9
5	4934.00	49.5 PK	74.0	-24.5	1.82 H	217	46.4	3.1
6	4934.00	35.6 AV	54.0	-18.4	1.82 H	217	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	100.4 PK			1.15 V	195	68.5	31.9
2	*2467.00	97.4 AV			1.15 V	195	65.5	31.9
3	2483.50	60.3 PK	74.0	-13.7	1.15 V	195	28.4	31.9
4	2483.50	50.0 AV	54.0	-4.0	1.15 V	195	18.1	31.9
5	4934.00	49.3 PK	74.0	-24.7	2.03 V	121	46.2	3.1
6	4934.00	35.5 AV	54.0	-18.5	2.03 V	121	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	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	23 °C, 67 % RH
Tested By	Karl Lee		

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	99.6 PK			1.89 H	283	67.7	31.9
2	*2472.00	96.6 AV			1.89 H	283	64.7	31.9
3	2483.50	61.9 PK	74.0	-12.1	1.89 H	283	30.0	31.9
4	2483.50	52.8 AV	54.0	-1.2	1.89 H	283	20.9	31.9
5	4944.00	49.4 PK	74.0	-24.6	1.79 H	217	46.3	3.1
6	4944.00	35.7 AV	54.0	-18.3	1.79 H	217	32.6	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	96.6 PK			1.15 V	194	64.7	31.9
2	*2472.00	93.5 AV			1.15 V	194	61.6	31.9
3	2483.50	60.3 PK	74.0	-13.7	1.15 V	194	28.4	31.9
4	2483.50	49.8 AV	54.0	-4.2	1.15 V	194	17.9	31.9
5	4944.00	49.3 PK	74.0	-24.7	2.03 V	121	46.2	3.1
6	4944.00	35.5 AV	54.0	-18.5	2.03 V	121	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	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	23 °C, 67 % RH
Tested By	Karl Lee		

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	1.78 H	285	36.4	31.8
2	2390.00	53.6 AV	54.0	-0.4	1.78 H	285	21.8	31.8
3	*2412.00	106.8 PK			1.78 H	285	75.0	31.8
4	*2412.00	97.7 AV			1.78 H	285	65.9	31.8
5	4824.00	49.4 PK	74.0	-24.6	1.84 H	216	46.4	3.0
6	4824.00	35.5 AV	54.0	-18.5	1.84 H	216	32.5	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	62.7 PK	74.0	-11.3	1.33 V	194	30.9	31.8
2	2390.00	50.5 AV	54.0	-3.5	1.33 V	194	18.7	31.8
3	*2412.00	103.8 PK			1.33 V	194	72.0	31.8
4	*2412.00	93.6 AV			1.33 V	194	61.8	31.8
5	4824.00	50.5 PK	74.0	-23.5	2.03 V	119	47.5	3.0
6	4824.00	35.8 AV	54.0	-18.2	2.03 V	119	32.8	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 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	23 °C, 67 % RH
Tested By	Karl Lee		

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	107.5 PK			1.93 H	284	75.7	31.8
2	*2437.00	98.4 AV			1.93 H	284	66.6	31.8
3	4874.00	49.5 PK	74.0	-24.5	1.77 H	216	46.5	3.0
4	4874.00	35.6 AV	54.0	-18.4	1.77 H	216	32.6	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	104.4 PK			1.09 V	196	72.6	31.8
2	*2437.00	94.2 AV			1.09 V	196	62.4	31.8
3	4874.00	49.6 PK	74.0	-24.4	2.03 V	125	46.6	3.0
4	4874.00	35.8 AV	54.0	-18.2	2.03 V	125	32.8	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	23 °C, 67 % RH
Tested By	Karl Lee		

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	106.7 PK			1.89 H	283	74.8	31.9
2	*2462.00	96.8 AV			1.89 H	283	64.9	31.9
3	2483.50	71.5 PK	74.0	-2.5	1.89 H	283	39.6	31.9
4	2483.50	53.2 AV	54.0	-0.8	1.89 H	283	21.3	31.9
5	4924.00	49.3 PK	74.0	-24.7	1.82 H	216	46.3	3.0
6	4924.00	35.5 AV	54.0	-18.5	1.82 H	216	32.5	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	*2462.00	103.7 PK			1.14 V	195	71.8	31.9
2	*2462.00	93.9 AV			1.14 V	195	62.0	31.9
3	2483.50	66.7 PK	74.0	-7.3	1.14 V	195	34.8	31.9
4	2483.50	49.7 AV	54.0	-4.3	1.14 V	195	17.8	31.9
5	4924.00	49.1 PK	74.0	-24.9	2.03 V	121	46.1	3.0
6	4924.00	35.2 AV	54.0	-18.8	2.03 V	121	32.2	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 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	23 °C, 67 % RH
Tested By	Karl Lee		

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			1.89 H	284	73.4	31.9
2	*2467.00	95.9 AV			1.89 H	284	64.0	31.9
3	2483.50	71.5 PK	74.0	-2.5	1.89 H	284	39.6	31.9
4	2483.50	53.2 AV	54.0	-0.8	1.89 H	284	21.3	31.9
5	4934.00	49.2 PK	74.0	-24.8	1.82 H	217	46.1	3.1
6	4934.00	35.4 AV	54.0	-18.6	1.82 H	217	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	*2467.00	102.5 PK			1.15 V	195	70.6	31.9
2	*2467.00	92.9 AV			1.15 V	195	61.0	31.9
3	2483.50	68.0 PK	74.0	-6.0	1.15 V	195	36.1	31.9
4	2483.50	50.1 AV	54.0	-3.9	1.15 V	195	18.2	31.9
5	4934.00	49.4 PK	74.0	-24.6	2.03 V	121	46.3	3.1
6	4934.00	35.6 AV	54.0	-18.4	2.03 V	121	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	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	23 °C, 67 % RH
Tested By	Karl Lee		

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	101.4 PK			1.89 H	283	69.5	31.9
2	*2472.00	91.8 AV			1.89 H	283	59.9	31.9
3	2483.50	70.4 PK	74.0	-3.6	1.89 H	283	38.5	31.9
4	2483.50	53.5 AV	54.0	-0.5	1.89 H	283	21.6	31.9
5	4944.00	49.4 PK	74.0	-24.6	1.79 H	217	46.3	3.1
6	4944.00	35.5 AV	54.0	-18.5	1.79 H	217	32.4	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	99.0 PK			1.15 V	194	67.1	31.9
2	*2472.00	89.3 AV			1.15 V	194	57.4	31.9
3	2483.50	66.9 PK	74.0	-7.1	1.15 V	194	35.0	31.9
4	2483.50	50.5 AV	54.0	-3.5	1.15 V	194	18.6	31.9
5	4944.00	49.2 PK	74.0	-24.8	2.03 V	121	46.1	3.1
6	4944.00	35.4 AV	54.0	-18.6	2.03 V	121	32.3	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	23 °C, 67 % RH
Tested By	Karl Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	71.1 PK	74.0	-2.9	1.78 H	285	39.3	31.8
2	2390.00	53.3 AV	54.0	-0.7	1.78 H	285	21.5	31.8
3	*2412.00	106.7 PK			1.78 H	285	74.9	31.8
4	*2412.00	96.3 AV			1.78 H	285	64.5	31.8
5	4824.00	49.2 PK	74.0	-24.8	1.84 H	216	46.2	3.0
6	4824.00	35.4 AV	54.0	-18.6	1.84 H	216	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	69.6 PK	74.0	-4.4	1.33 V	194	37.8	31.8
2	2390.00	51.7 AV	54.0	-2.3	1.33 V	194	19.9	31.8
3	*2412.00	104.0 PK			1.33 V	194	72.2	31.8
4	*2412.00	93.4 AV			1.33 V	194	61.6	31.8
5	4824.00	49.5 PK	74.0	-24.5	2.03 V	119	46.5	3.0
6	4824.00	35.6 AV	54.0	-18.4	2.03 V	119	32.6	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 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	23 °C, 67 % RH
Tested By	Karl Lee		

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	107.5 PK			1.93 H	284	75.7	31.8
2	*2437.00	97.0 AV			1.93 H	284	65.2	31.8
3	4874.00	50.1 PK	74.0	-23.9	1.77 H	216	47.1	3.0
4	4874.00	36.2 AV	54.0	-17.8	1.77 H	216	33.2	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	104.7 PK			1.09 V	196	72.9	31.8
2	*2437.00	94.2 AV			1.09 V	196	62.4	31.8
3	4874.00	49.5 PK	74.0	-24.5	2.03 V	125	46.5	3.0
4	4874.00	35.5 AV	54.0	-18.5	2.03 V	125	32.5	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	23 °C, 67 % RH
Tested By	Karl Lee		

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	106.7 PK			1.89 H	283	74.8	31.9
2	*2462.00	96.3 AV			1.89 H	283	64.4	31.9
3	2483.50	73.0 PK	74.0	-1.0	1.89 H	283	41.1	31.9
4	2483.50	53.0 AV	54.0	-1.0	1.89 H	283	21.1	31.9
5	4924.00	49.5 PK	74.0	-24.5	1.82 H	216	46.5	3.0
6	4924.00	35.7 AV	54.0	-18.3	1.82 H	216	32.7	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	*2462.00	103.8 PK			1.14 V	195	71.9	31.9
2	*2462.00	93.3 AV			1.14 V	195	61.4	31.9
3	2483.50	68.4 PK	74.0	-5.6	1.14 V	195	36.5	31.9
4	2483.50	50.2 AV	54.0	-3.8	1.14 V	195	18.3	31.9
5	4924.00	49.3 PK	74.0	-24.7	2.03 V	121	46.3	3.0
6	4924.00	35.5 AV	54.0	-18.5	2.03 V	121	32.5	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 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	23 °C, 67 % RH
Tested By	Karl Lee		

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	106.0 PK			1.89 H	284	74.1	31.9
2	*2467.00	95.5 AV			1.89 H	284	63.6	31.9
3	2483.50	72.8 PK	74.0	-1.2	1.89 H	284	40.9	31.9
4	2483.50	53.5 AV	54.0	-0.5	1.89 H	284	21.6	31.9
5	4934.00	49.5 PK	74.0	-24.5	1.82 H	217	46.4	3.1
6	4934.00	35.7 AV	54.0	-18.3	1.82 H	217	32.6	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	103.2 PK			1.15 V	195	71.3	31.9
2	*2467.00	92.3 AV			1.15 V	195	60.4	31.9
3	2483.50	71.4 PK	74.0	-2.6	1.15 V	195	39.5	31.9
4	2483.50	49.9 AV	54.0	-4.1	1.15 V	195	18.0	31.9
5	4934.00	49.9 PK	74.0	-24.1	2.03 V	121	46.8	3.1
6	4934.00	36.1 AV	54.0	-17.9	2.03 V	121	33.0	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	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	23 °C, 67 % RH
Tested By	Karl Lee		

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	101.9 PK			1.89 H	283	70.0	31.9
2	*2472.00	91.0 AV			1.89 H	283	59.1	31.9
3	2483.50	73.4 PK	74.0	-0.6	1.89 H	283	41.5	31.9
4	2483.50	53.6 AV	54.0	-0.4	1.89 H	283	21.7	31.9
5	4944.00	49.3 PK	74.0	-24.7	1.79 H	217	46.2	3.1
6	4944.00	35.5 AV	54.0	-18.5	1.79 H	217	32.4	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	98.9 PK			1.15 V	194	67.0	31.9
2	*2472.00	88.2 AV			1.15 V	194	56.3	31.9
3	2483.50	69.6 PK	74.0	-4.4	1.15 V	194	37.7	31.9
4	2483.50	50.6 AV	54.0	-3.4	1.15 V	194	18.7	31.9
5	4944.00	49.4 PK	74.0	-24.6	2.03 V	121	46.3	3.1
6	4944.00	35.5 AV	54.0	-18.5	2.03 V	121	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	23 °C, 67 % RH
Tested By	Karl Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	68.8 PK	74.0	-5.2	1.78 H	285	37.0	31.8
2	2390.00	53.1 AV	54.0	-0.9	1.78 H	285	21.3	31.8
3	*2422.00	102.4 PK			1.78 H	285	70.6	31.8
4	*2422.00	91.2 AV			1.78 H	285	59.4	31.8
5	2483.50	59.5 PK	74.0	-14.5	1.78 H	285	27.6	31.9
6	2483.50	45.5 AV	54.0	-8.5	1.78 H	285	13.6	31.9
7	4844.00	49.5 PK	74.0	-24.5	1.84 H	213	46.6	2.9
8	4844.00	35.7 AV	54.0	-18.3	1.84 H	213	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	1.33 V	194	35.4	31.8
2	2390.00	50.7 AV	54.0	-3.3	1.33 V	194	18.9	31.8
3	*2422.00	98.7 PK			1.33 V	194	66.9	31.8
4	*2422.00	88.2 AV			1.33 V	194	56.4	31.8
5	2483.50	57.3 PK	74.0	-16.7	1.33 V	194	25.4	31.9
6	2483.50	44.8 AV	54.0	-9.2	1.33 V	194	12.9	31.9
7	4844.00	49.2 PK	74.0	-24.8	2.10 V	118	46.3	2.9
8	4844.00	35.3 AV	54.0	-18.7	2.10 V	118	32.4	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	23 °C, 67 % RH
Tested By	Karl Lee		

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	66.8 PK	74.0	-7.2	1.93 H	284	35.0	31.8
2	2390.00	46.9 AV	54.0	-7.1	1.93 H	284	15.1	31.8
3	*2437.00	104.6 PK			1.93 H	284	72.8	31.8
4	*2437.00	94.0 AV			1.93 H	284	62.2	31.8
5	2483.50	71.9 PK	74.0	-2.1	1.93 H	284	40.0	31.9
6	2483.50	53.6 AV	54.0	-0.4	1.93 H	284	21.7	31.9
7	4874.00	49.6 PK	74.0	-24.4	1.77 H	214	46.6	3.0
8	4874.00	35.8 AV	54.0	-18.2	1.77 H	214	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	2390.00	63.7 PK	74.0	-10.3	1.09 V	196	67.9	-4.2
2	2390.00	48.2 AV	54.0	-5.8	1.09 V	196	52.4	-4.2
3	*2437.00	101.6 PK			1.09 V	196	69.8	31.8
4	*2437.00	90.9 AV			1.09 V	196	59.1	31.8
5	2483.50	65.9 PK	74.0	-8.1	1.09 V	196	70.0	-4.1
6	2483.50	50.0 AV	54.0	-4.0	1.09 V	196	54.1	-4.1
7	4874.00	49.3 PK	74.0	-24.7	2.03 V	121	46.3	3.0
8	4874.00	35.5 AV	54.0	-18.5	2.03 V	121	32.5	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	23 °C, 67 % RH
Tested By	Karl Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	56.7 PK	74.0	-17.3	1.89 H	283	24.9	31.8
2	2390.00	44.1 AV	54.0	-9.9	1.89 H	283	12.3	31.8
3	*2452.00	101.6 PK			1.89 H	283	69.7	31.9
4	*2452.00	90.9 AV			1.89 H	283	59.0	31.9
5	2483.50	70.3 PK	74.0	-3.7	1.89 H	283	38.4	31.9
6	2483.50	53.6 AV	54.0	-0.4	1.89 H	283	21.7	31.9
7	4904.00	49.5 PK	74.0	-24.5	1.82 H	222	46.5	3.0
8	4904.00	35.6 AV	54.0	-18.4	1.82 H	222	32.6	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	56.5 PK	74.0	-17.5	1.14 V	195	24.7	31.8
2	2390.00	43.9 AV	54.0	-10.1	1.14 V	195	12.1	31.8
3	*2452.00	99.1 PK			1.14 V	195	67.2	31.9
4	*2452.00	87.9 AV			1.14 V	195	56.0	31.9
5	2483.50	67.7 PK	74.0	-6.3	1.14 V	195	35.8	31.9
6	2483.50	50.7 AV	54.0	-3.3	1.14 V	195	18.8	31.9
7	4904.00	49.3 PK	74.0	-24.7	2.06 V	121	46.3	3.0
8	4904.00	35.5 AV	54.0	-18.5	2.06 V	121	32.5	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 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	23 °C, 67 % RH
Tested By	Karl Lee		

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	57.0 PK	74.0	-17.0	1.89 H	284	25.2	31.8
2	2390.00	44.0 AV	54.0	-10.0	1.89 H	284	12.2	31.8
3	*2457.00	101.9 PK			1.89 H	284	70.0	31.9
4	*2457.00	90.7 AV			1.89 H	284	58.8	31.9
5	2483.50	70.0 PK	74.0	-4.0	1.89 H	284	38.1	31.9
6	2483.50	53.6 AV	54.0	-0.4	1.89 H	284	21.7	31.9
7	4914.00	49.4 PK	74.0	-24.6	1.82 H	219	46.4	3.0
8	4914.00	35.6 AV	54.0	-18.4	1.82 H	219	32.6	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	58.0 PK	74.0	-16.0	1.15 V	195	26.2	31.8
2	2390.00	43.8 AV	54.0	-10.2	1.15 V	195	12.0	31.8
3	*2457.00	98.6 PK			1.15 V	195	66.7	31.9
4	*2457.00	87.5 AV			1.15 V	195	55.6	31.9
5	2483.50	67.0 PK	74.0	-7.0	1.15 V	195	35.1	31.9
6	2483.50	50.4 AV	54.0	-3.6	1.15 V	195	18.5	31.9
7	4914.00	49.3 PK	74.0	-24.7	2.03 V	118	46.3	3.0
8	4914.00	35.4 AV	54.0	-18.6	2.03 V	118	32.4	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 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	23 °C, 67 % RH
Tested By	Karl Lee		

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	57.5 PK	74.0	-16.5	1.89 H	283	25.7	31.8
2	2390.00	43.9 AV	54.0	-10.1	1.89 H	283	12.1	31.8
3	*2462.00	101.7 PK			1.89 H	283	69.8	31.9
4	*2462.00	90.5 AV			1.89 H	283	58.6	31.9
5	2483.50	73.4 PK	74.0	-0.6	1.89 H	283	41.5	31.9
6	2483.50	53.6 AV	54.0	-0.4	1.89 H	283	21.7	31.9
7	4924.00	49.2 PK	74.0	-24.8	1.76 H	217	46.2	3.0
8	4924.00	35.2 AV	54.0	-18.8	1.76 H	217	32.2	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	57.0 PK	74.0	-17.0	1.15 V	194	25.2	31.8
2	2390.00	43.8 AV	54.0	-10.2	1.15 V	194	12.0	31.8
3	*2462.00	97.2 PK			1.15 V	194	65.3	31.9
4	*2462.00	86.0 AV			1.15 V	194	54.1	31.9
5	2483.50	67.6 PK	74.0	-6.4	1.15 V	194	35.7	31.9
6	2483.50	50.0 AV	54.0	-4.0	1.15 V	194	18.1	31.9
7	4924.00	49.1 PK	74.0	-24.9	2.03 V	121	46.1	3.0
8	4924.00	35.4 AV	54.0	-18.6	2.03 V	121	32.4	3.0

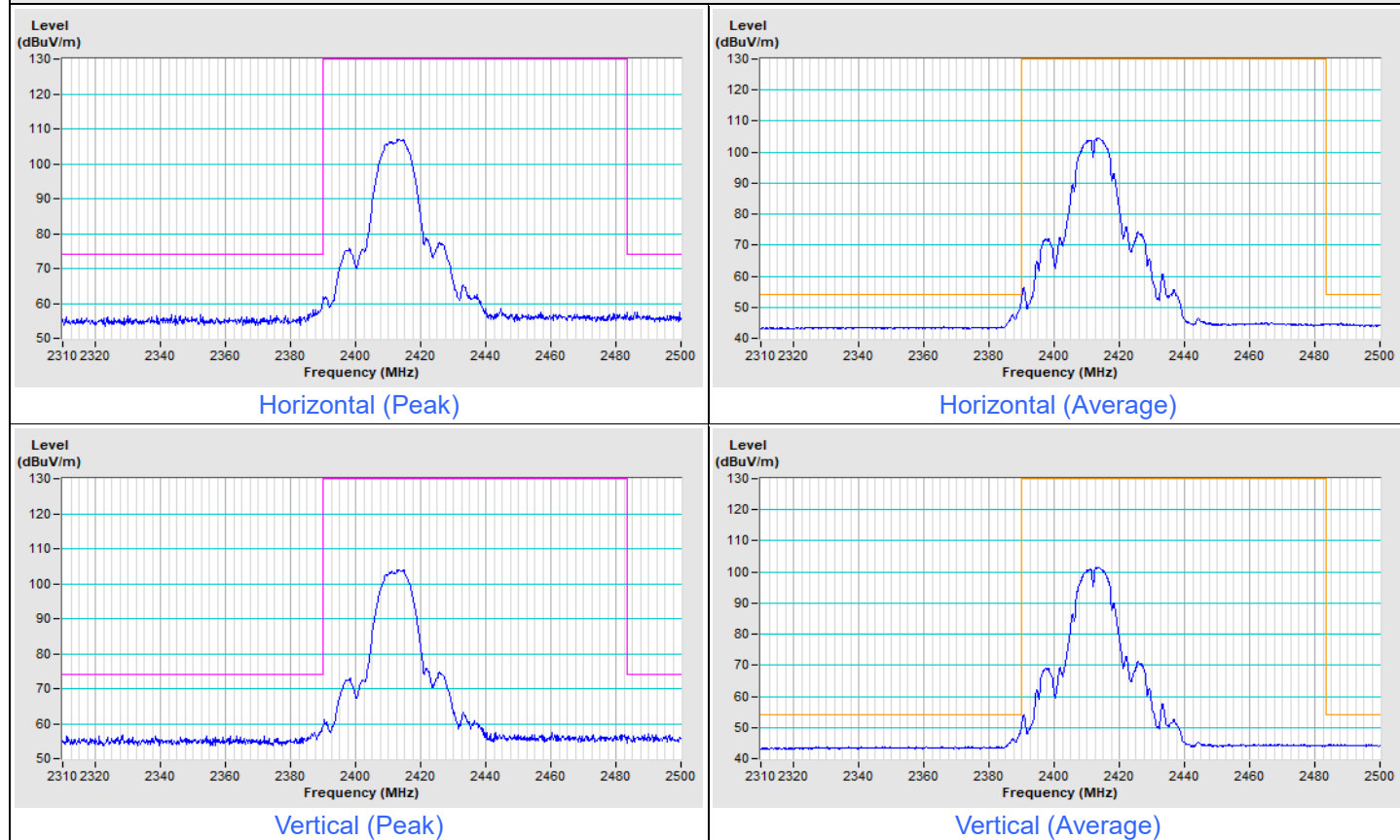
Remarks:

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.

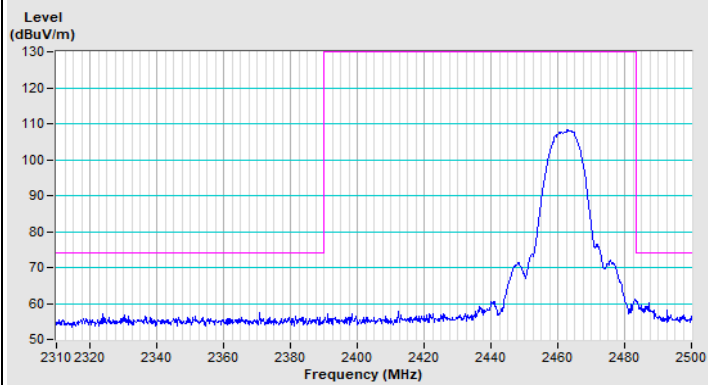
Plot of Band Edge

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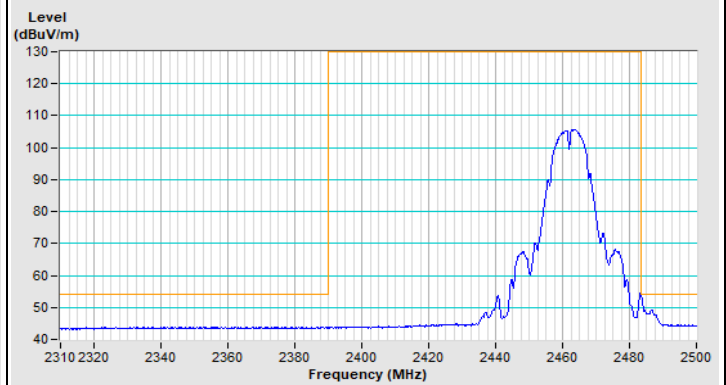
802.11b Channel 1



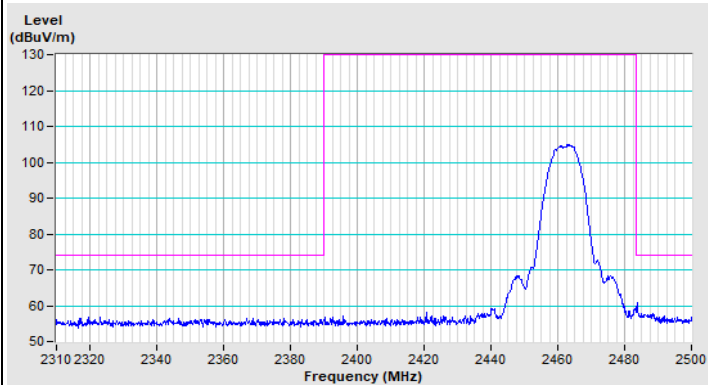
802.11b Channel 11



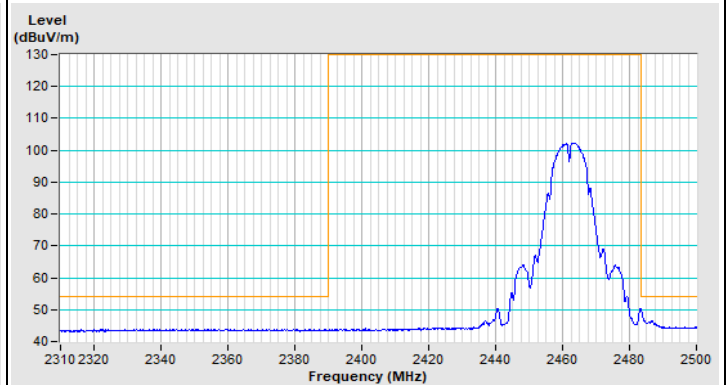
Horizontal (Peak)



Horizontal (Average)

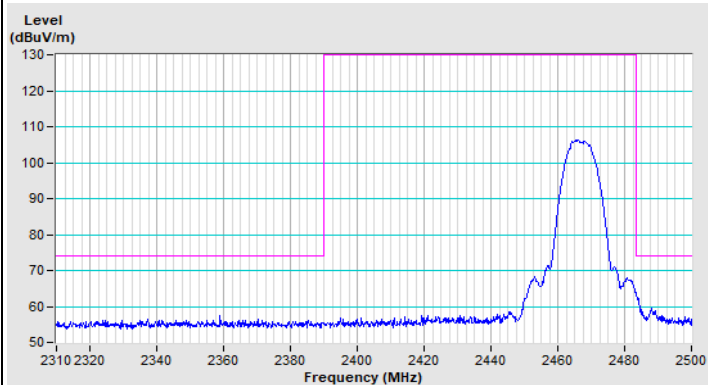


Vertical (Peak)

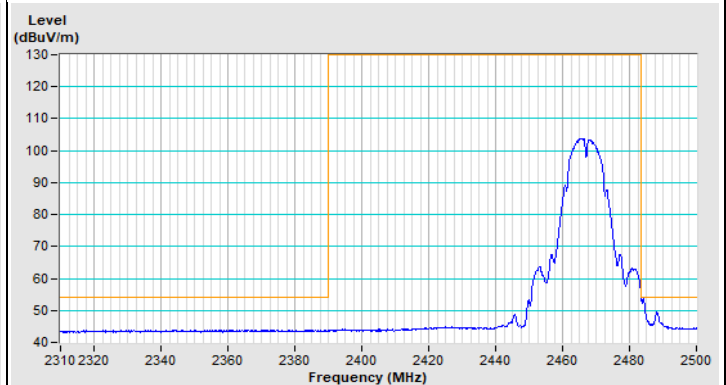


Vertical (Average)

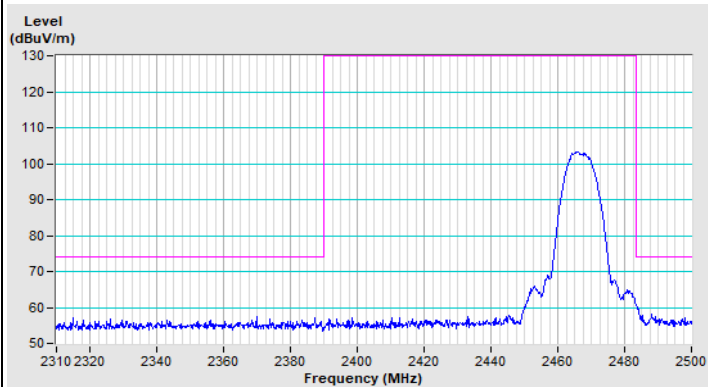
802.11b Channel 12



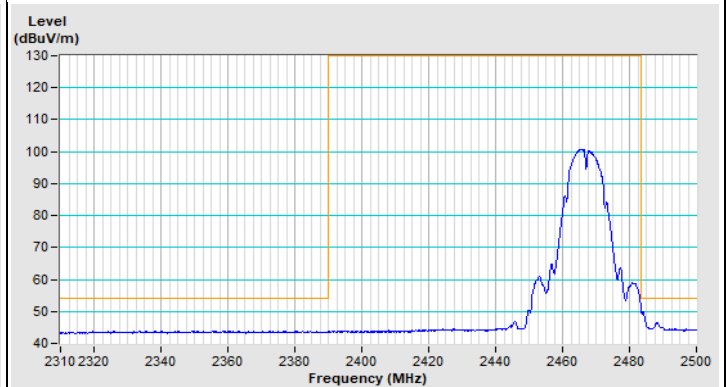
Horizontal (Peak)



Horizontal (Average)

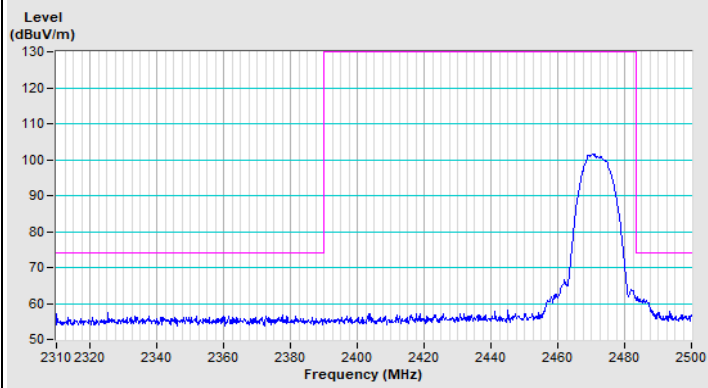


Vertical (Peak)

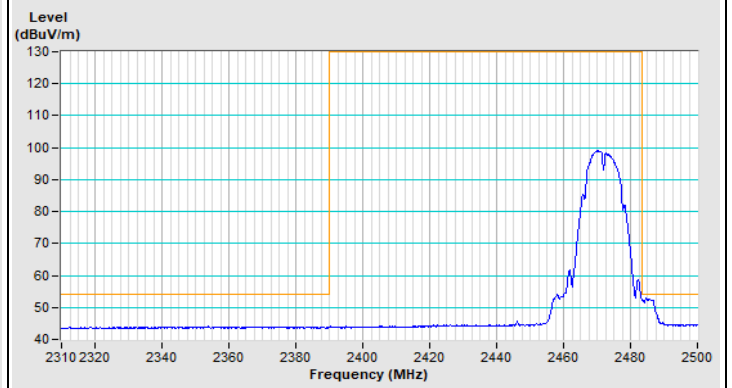


Vertical (Average)

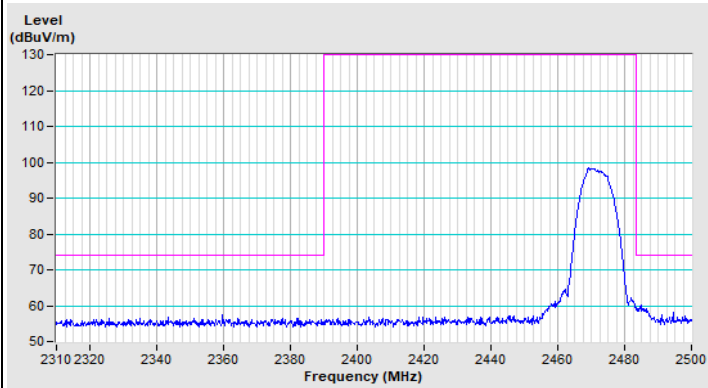
802.11b Channel 13



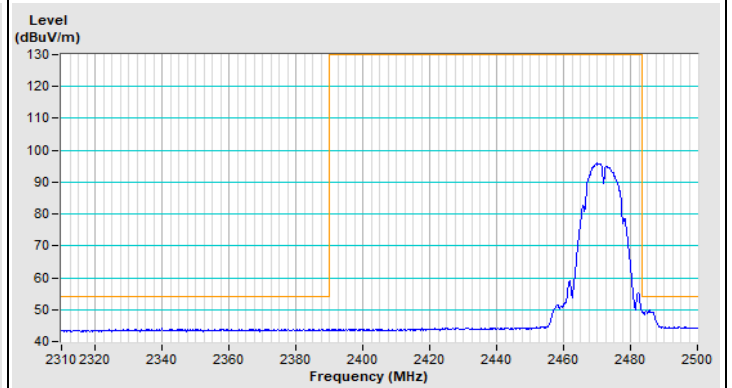
Horizontal (Peak)



Horizontal (Average)



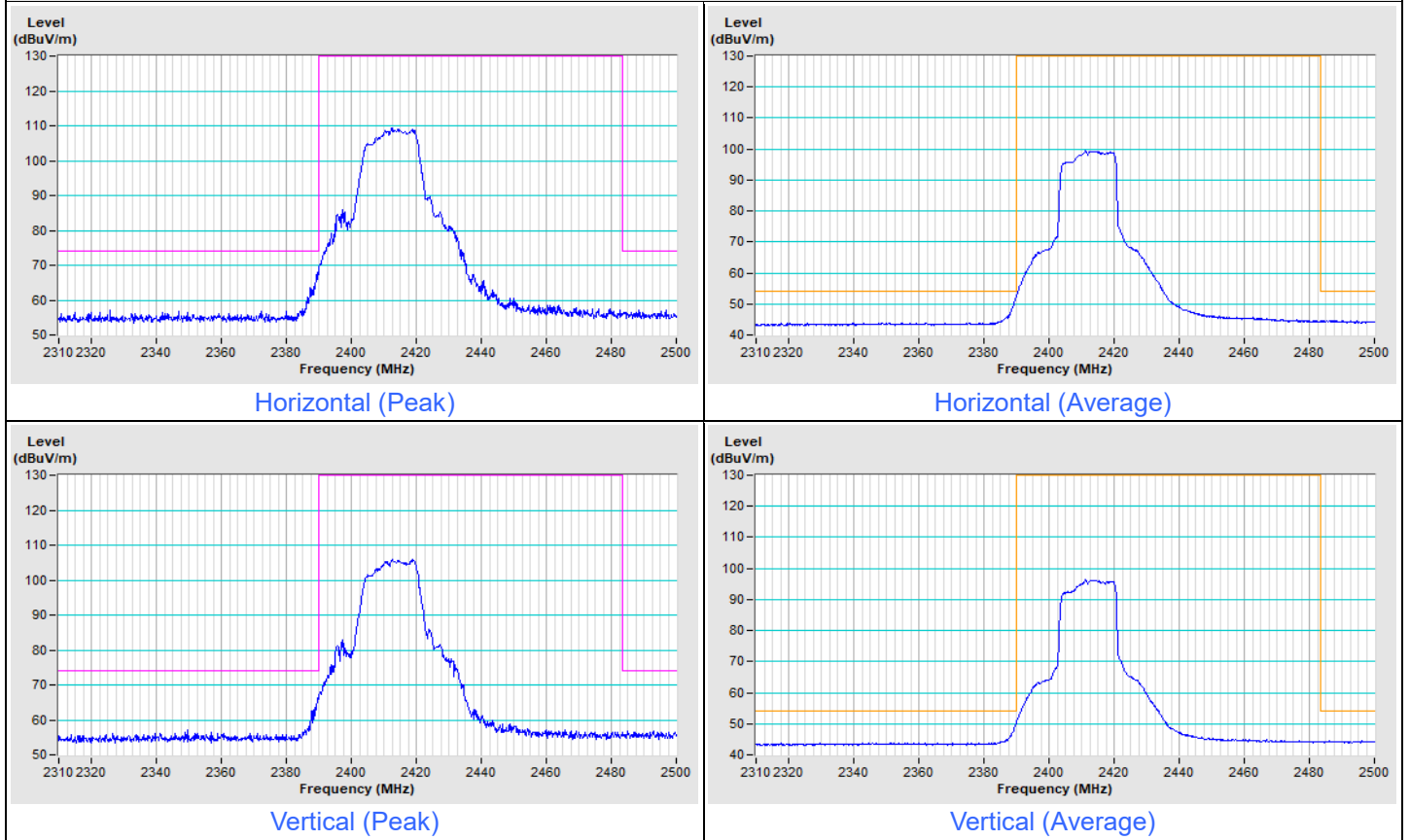
Vertical (Peak)



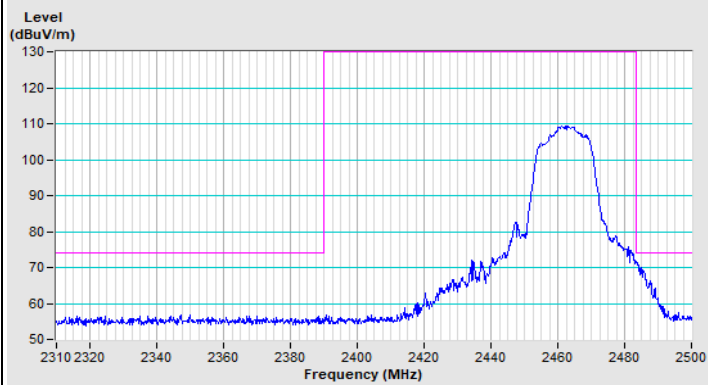
Vertical (Average)

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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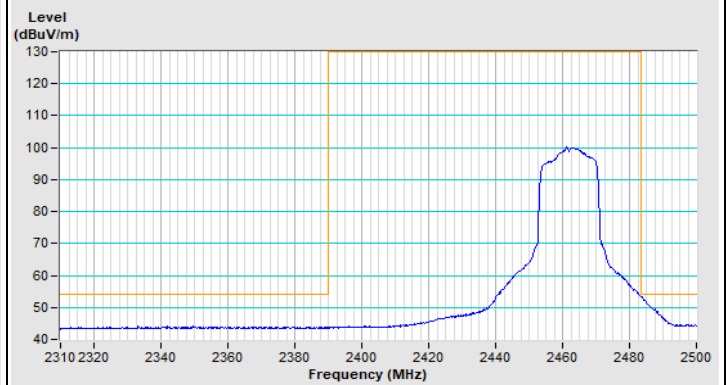
802.11g Channel 1



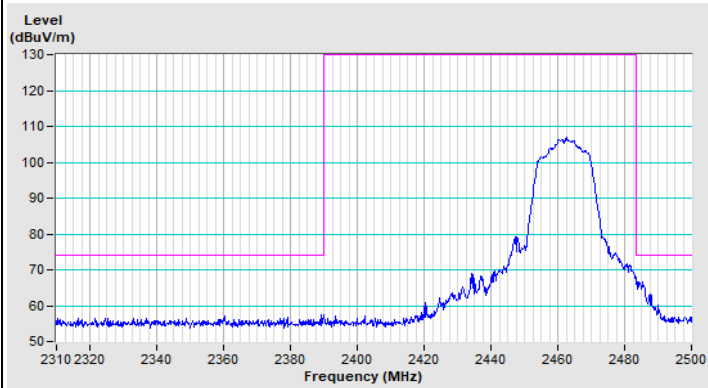
802.11g Channel 11



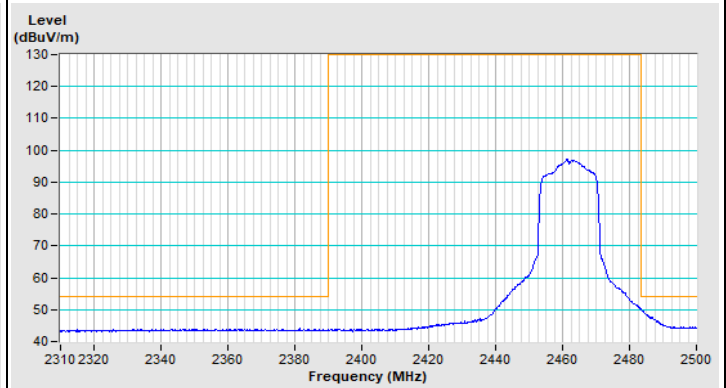
Horizontal (Peak)



Horizontal (Average)

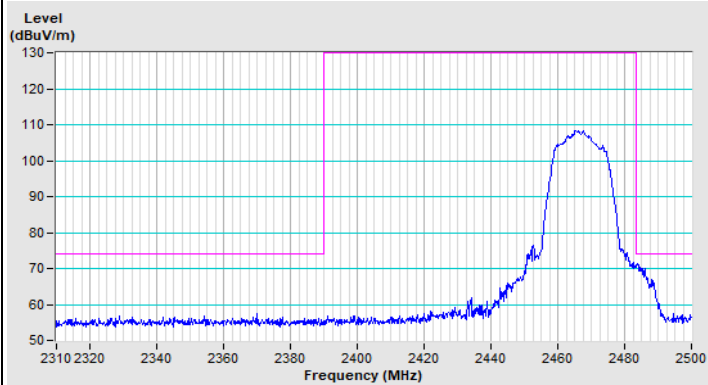


Vertical (Peak)

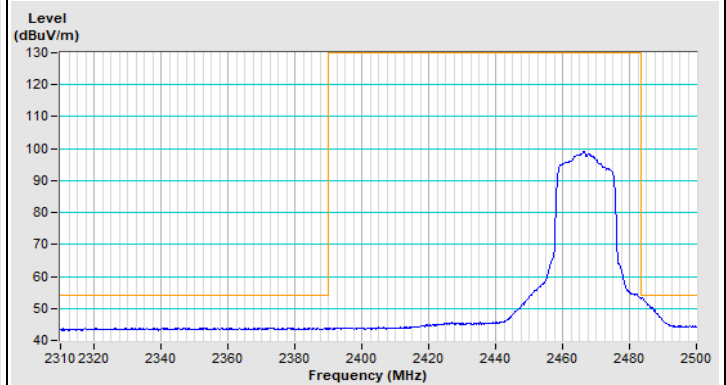


Vertical (Average)

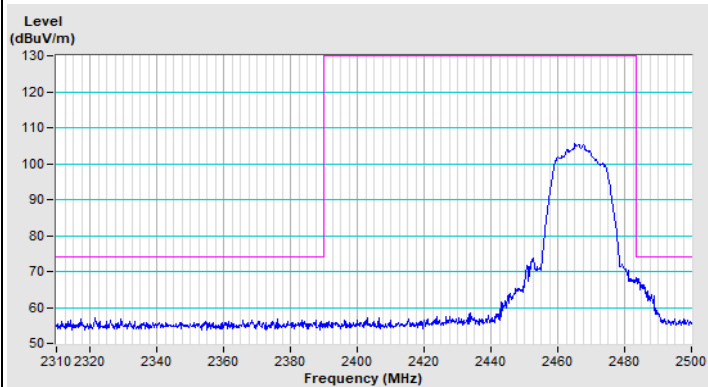
802.11g Channel 12



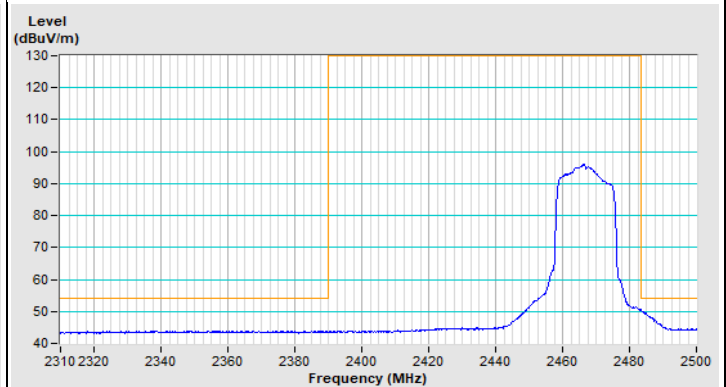
Horizontal (Peak)



Horizontal (Average)

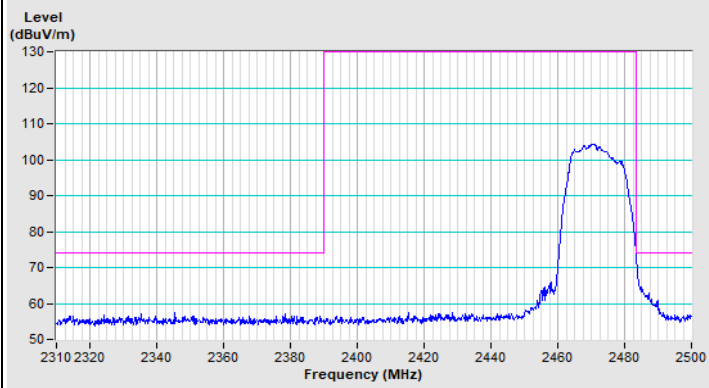


Vertical (Peak)

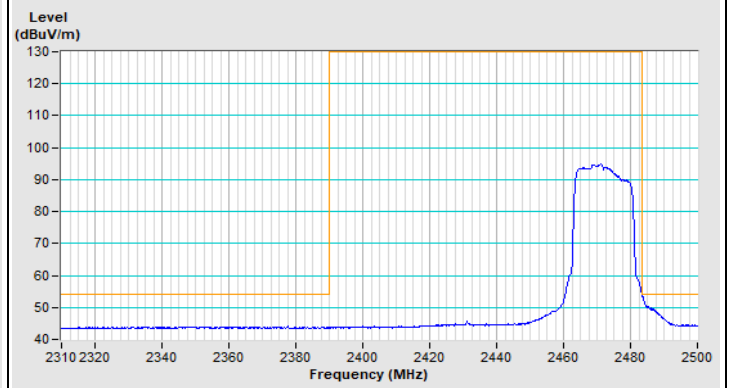


Vertical (Average)

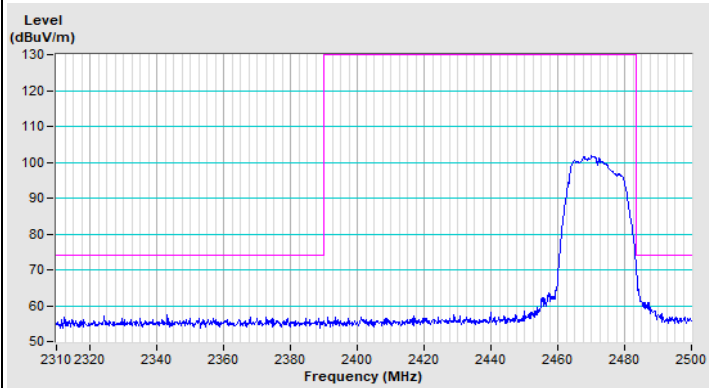
802.11g Channel 13



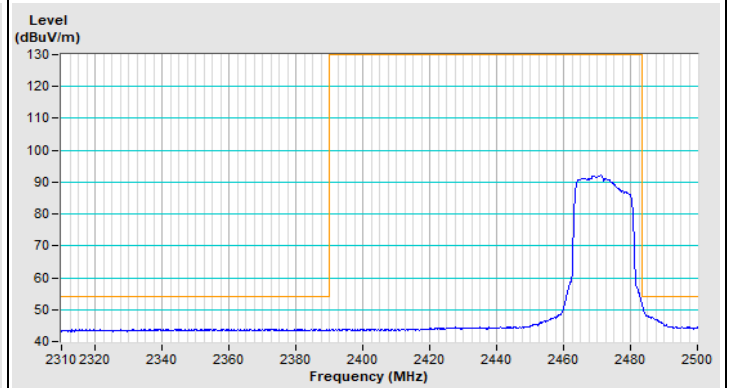
Horizontal (Peak)



Horizontal (Average)



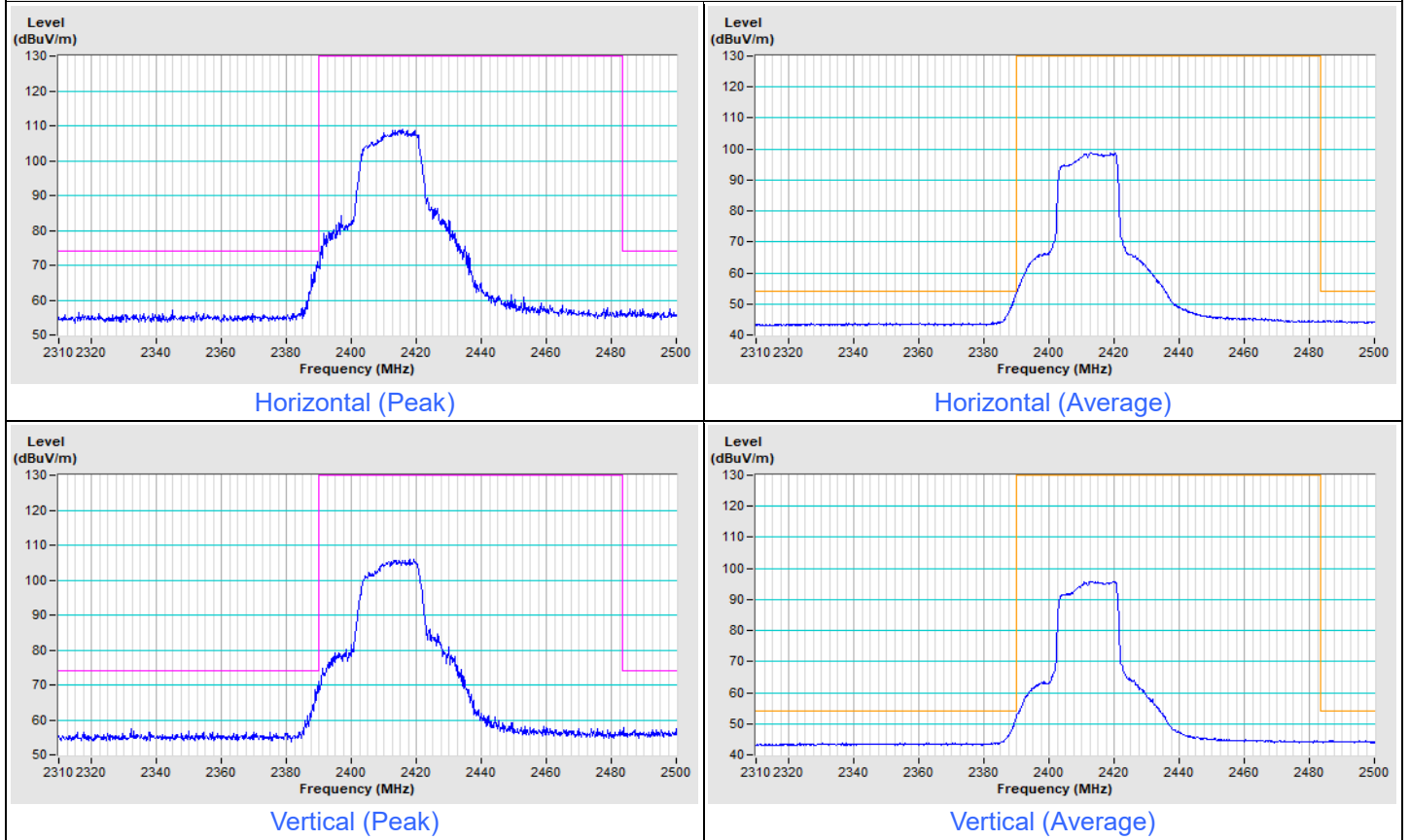
Vertical (Peak)



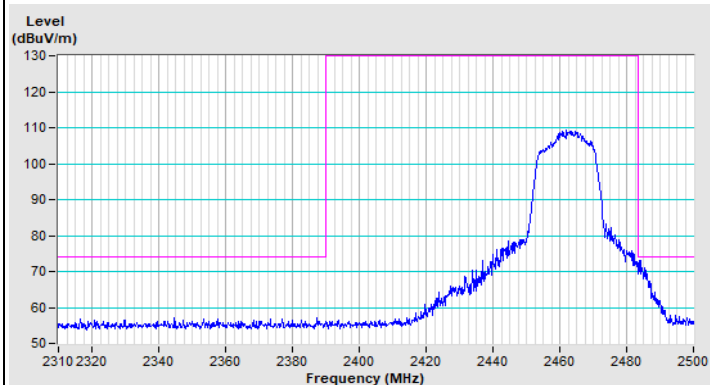
Vertical (Average)

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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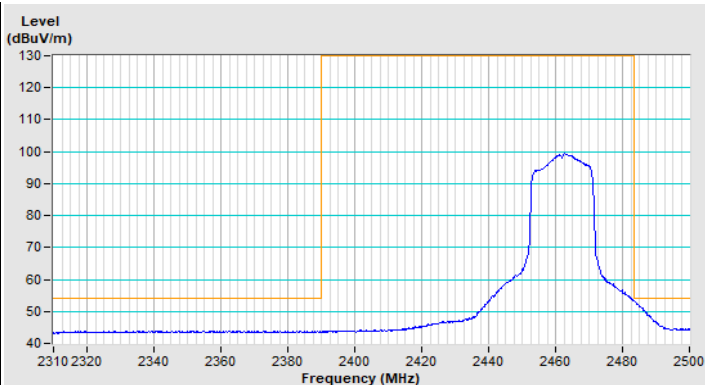
VHT20 Channel 1



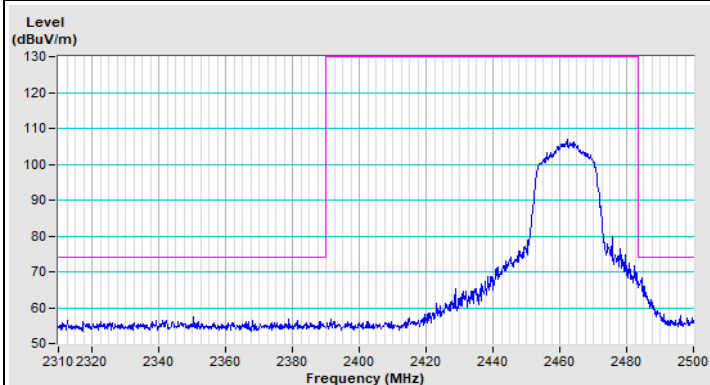
VHT20 Channel 11



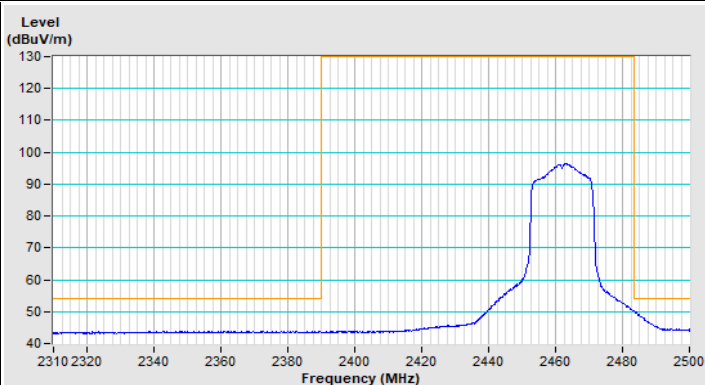
Horizontal (Peak)



Horizontal (Average)

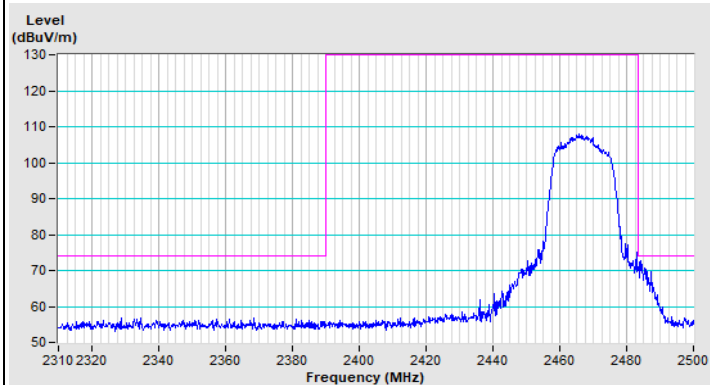


Vertical (Peak)

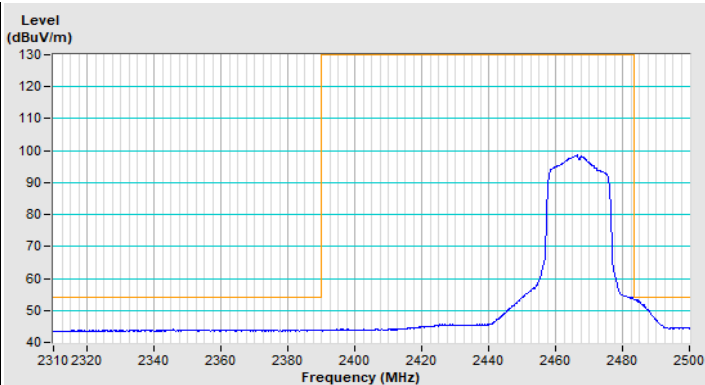


Vertical (Average)

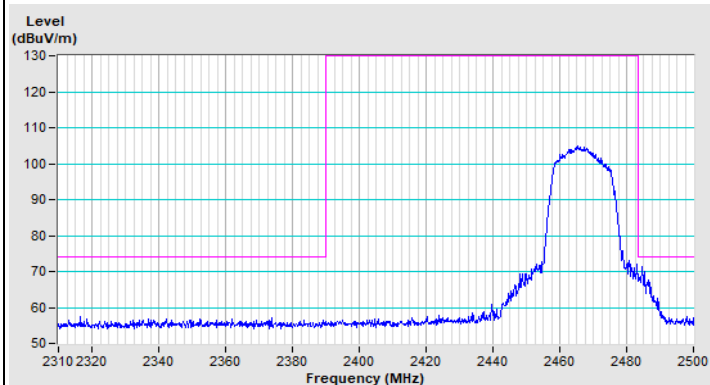
VHT20 Channel 12



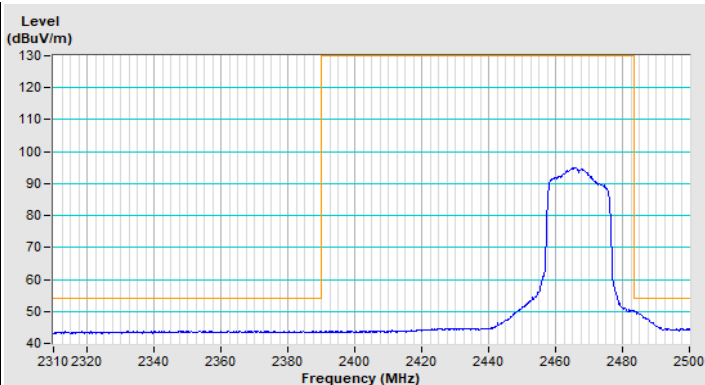
Horizontal (Peak)



Horizontal (Average)

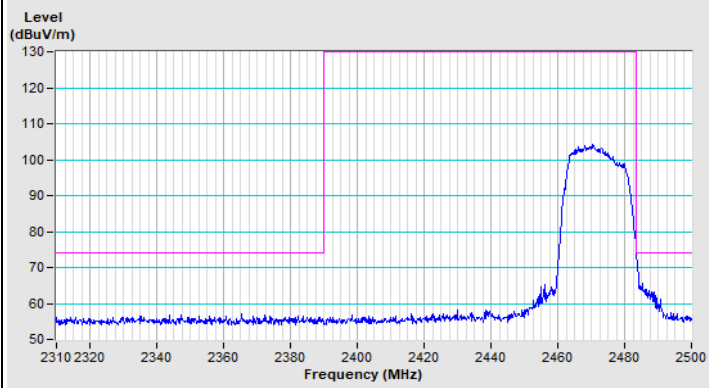


Vertical (Peak)

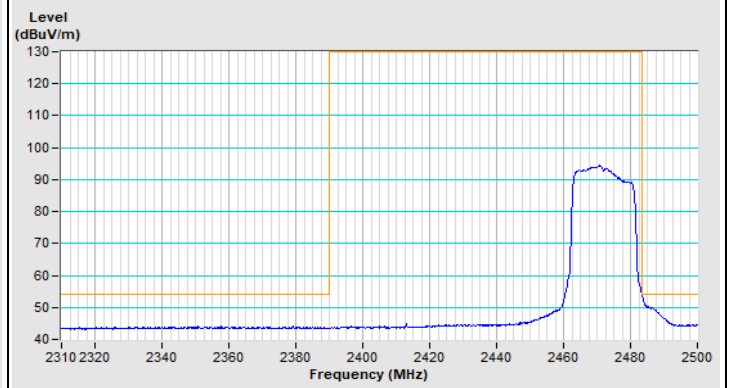


Vertical (Average)

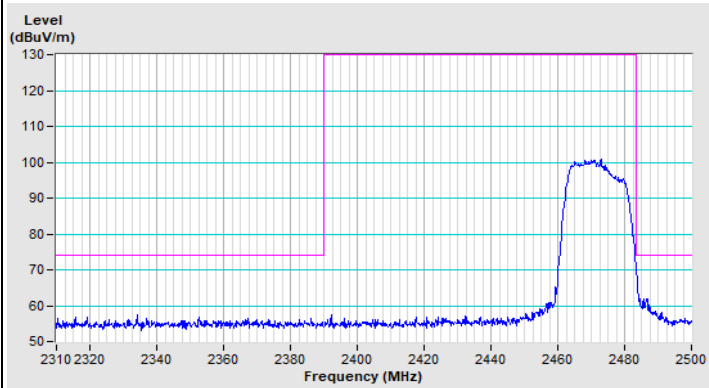
VHT20 Channel 13



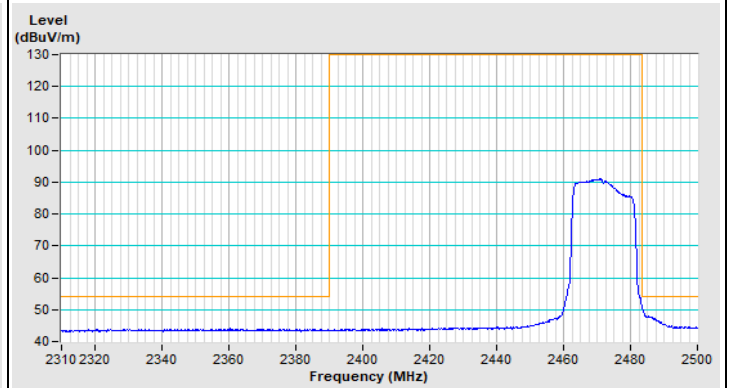
Horizontal (Peak)



Horizontal (Average)



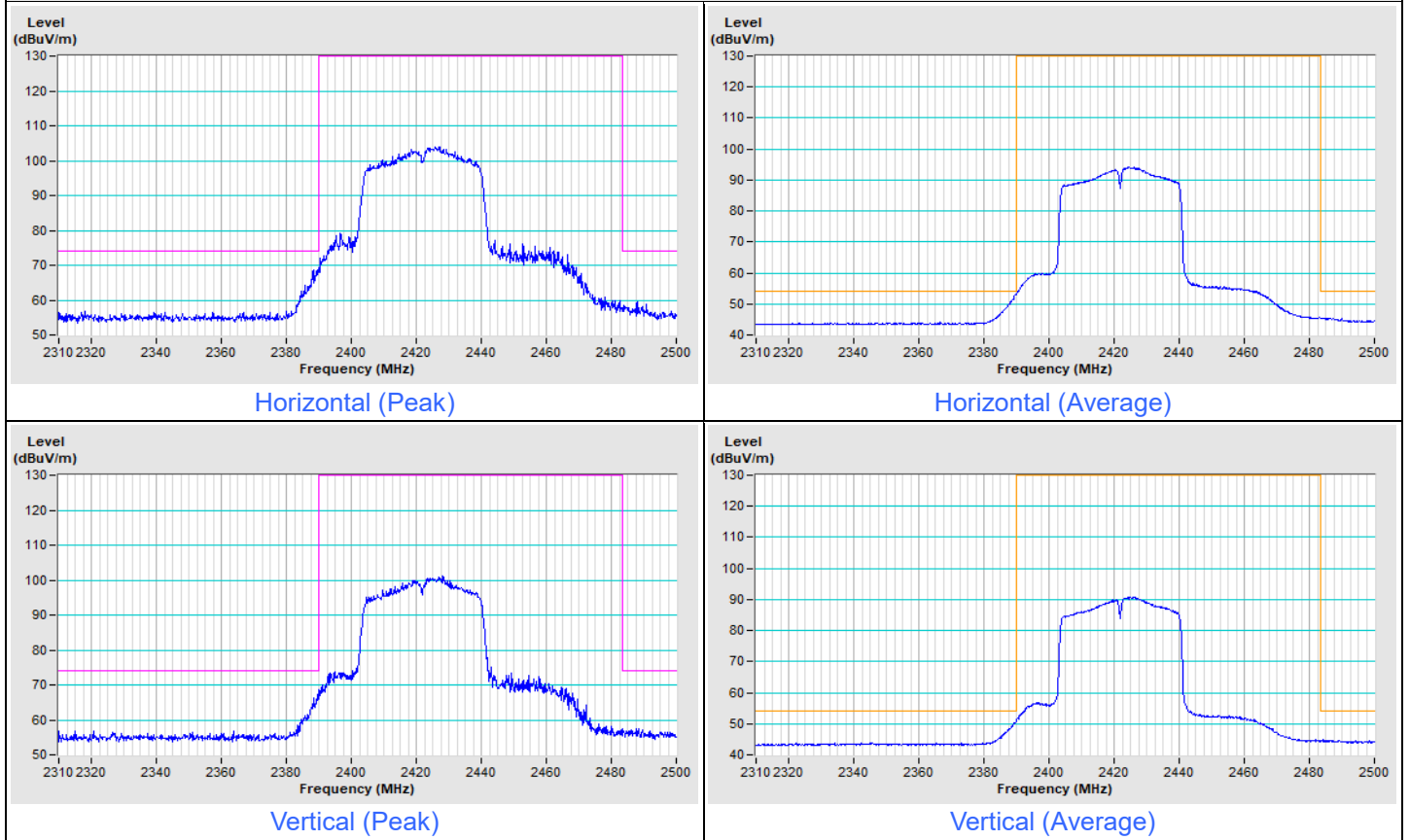
Vertical (Peak)



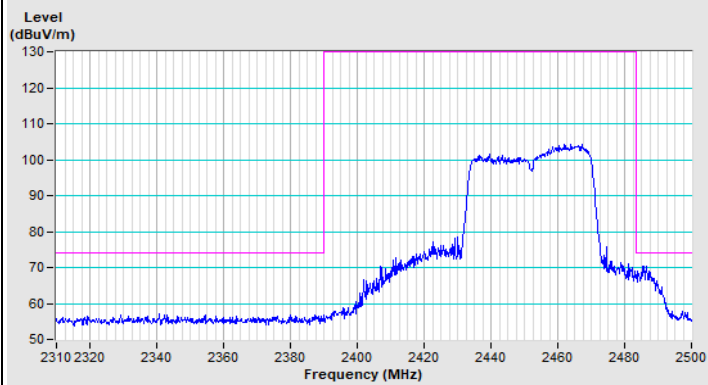
Vertical (Average)

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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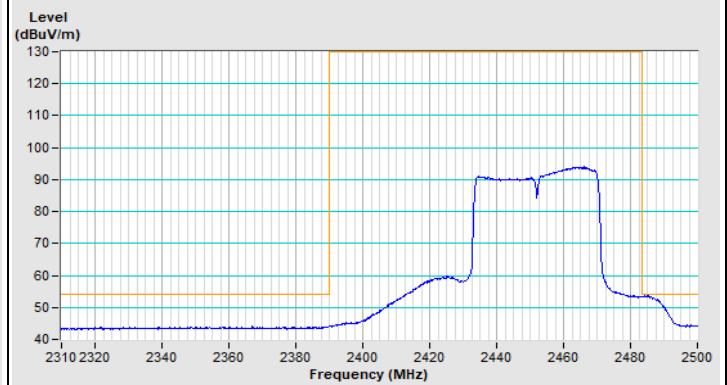
VHT40 Channel 3



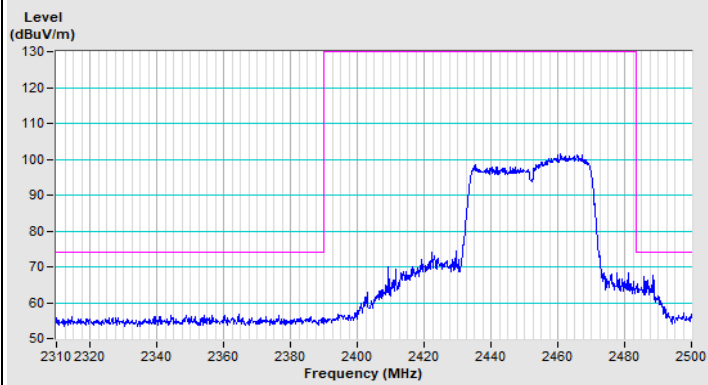
VHT40 Channel 9



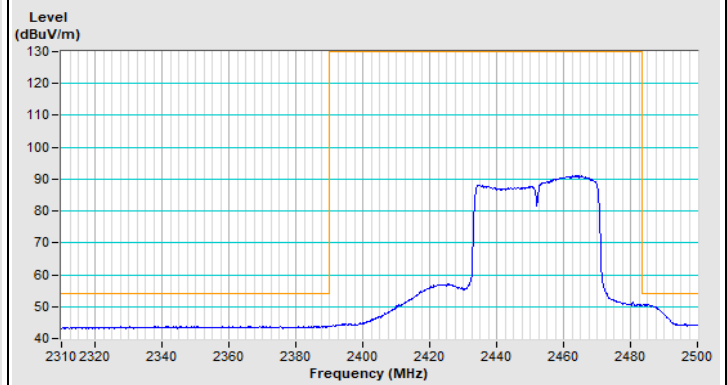
Horizontal (Peak)



Horizontal (Average)

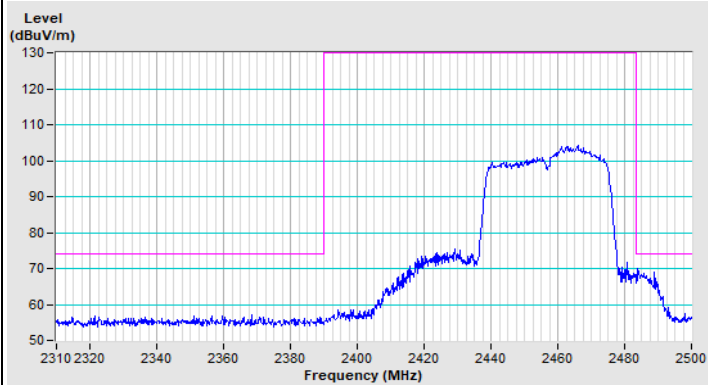


Vertical (Peak)

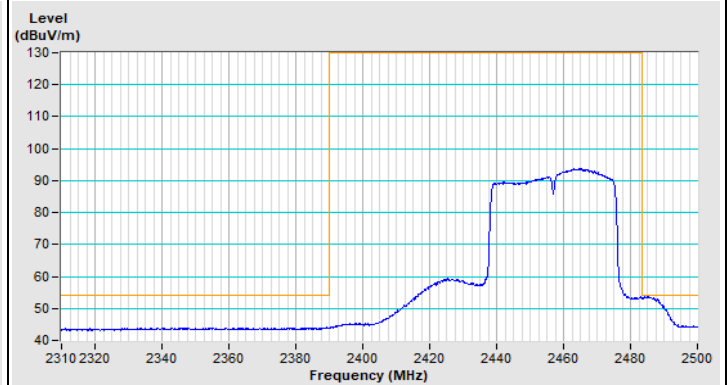


Vertical (Average)

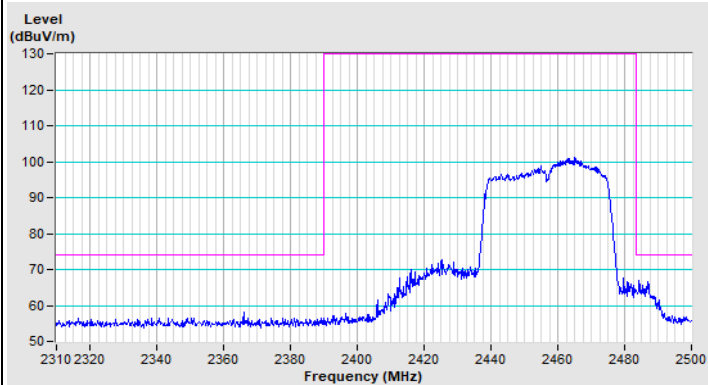
VHT40 Channel 10



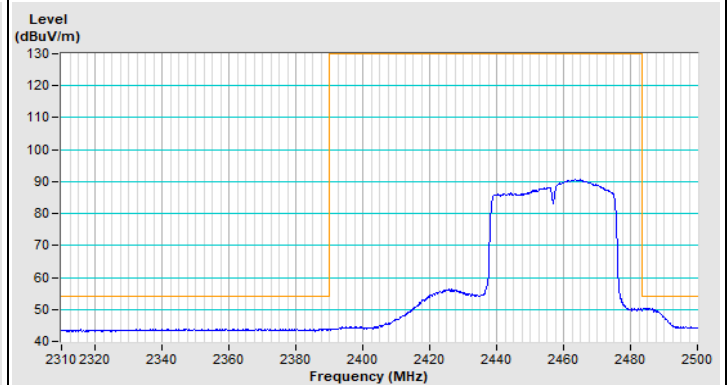
Horizontal (Peak)



Horizontal (Average)

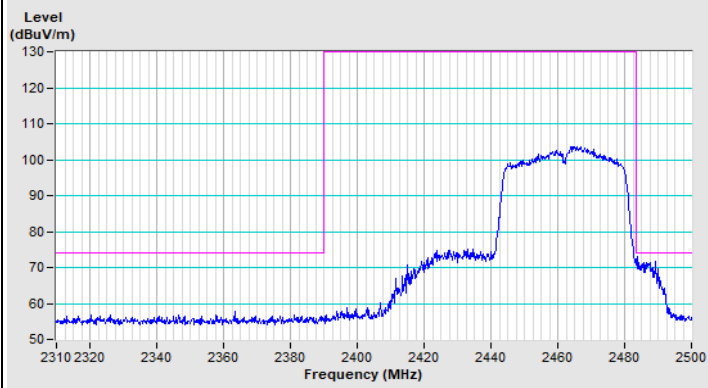


Vertical (Peak)

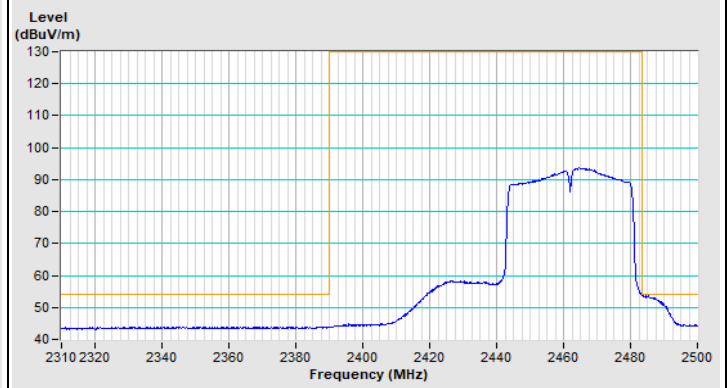


Vertical (Average)

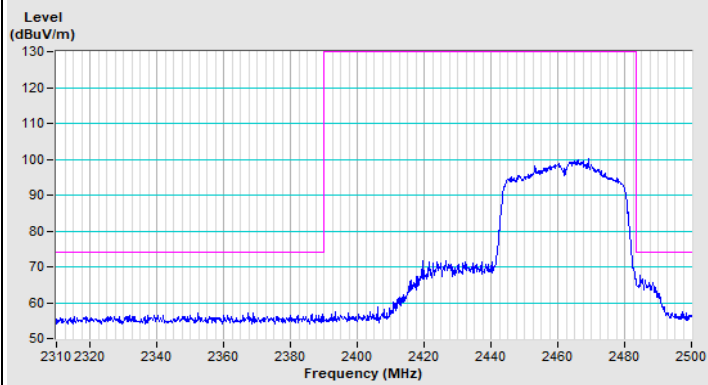
VHT40 Channel 11



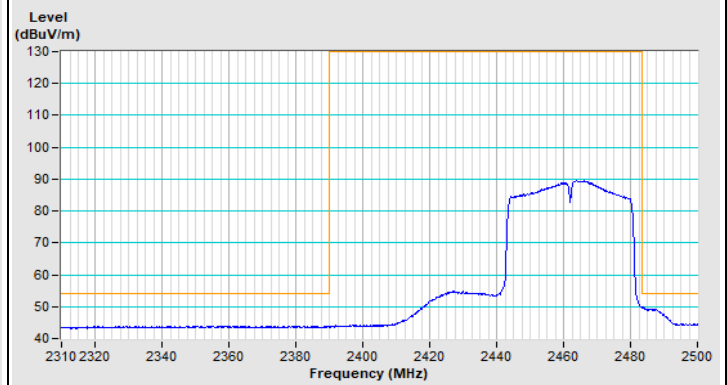
Horizontal (Peak)



Horizontal (Average)



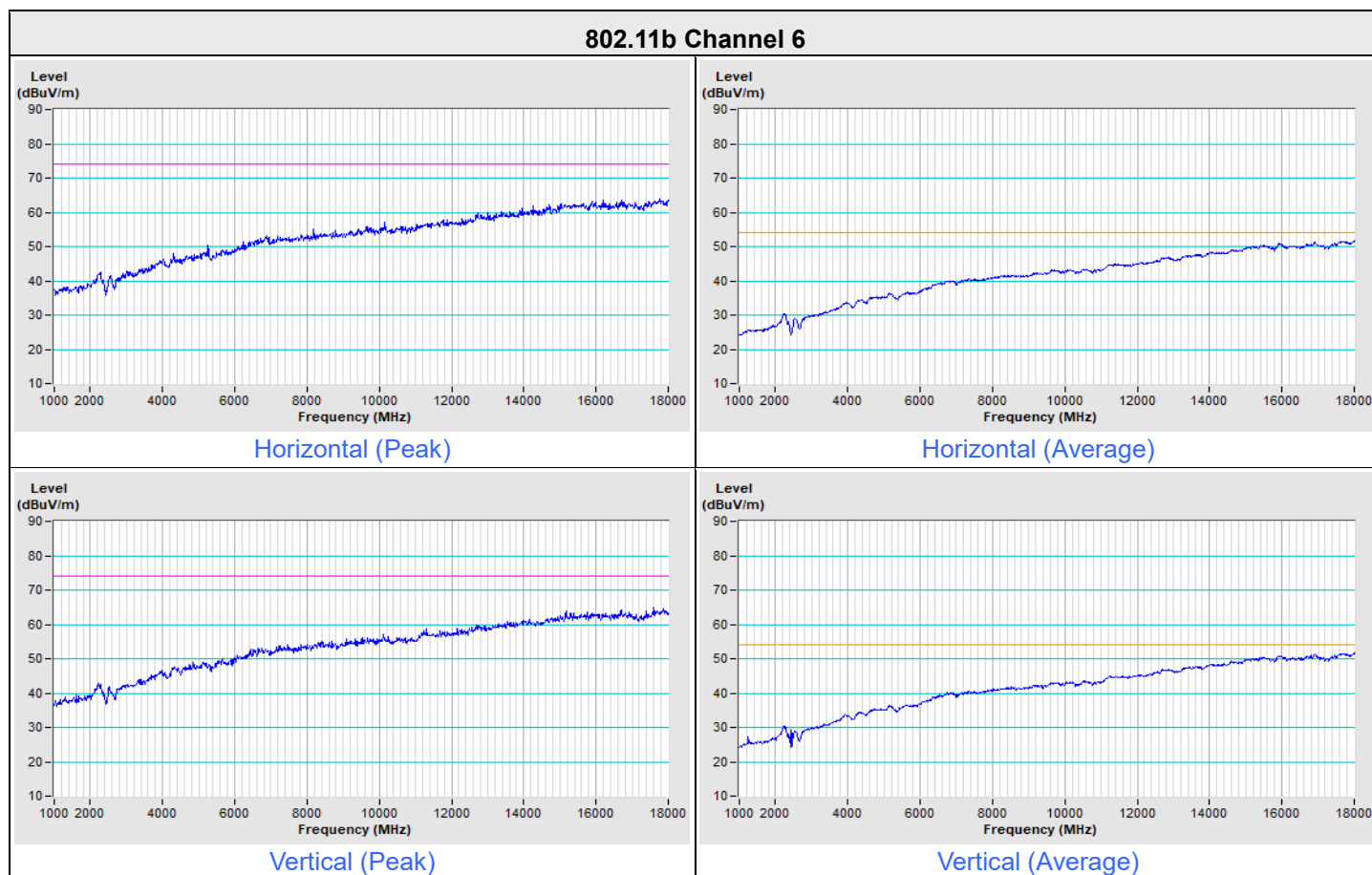
Vertical (Peak)



Vertical (Average)

Plot of Other Emission

Frequency Range	1 GHz ~ 18 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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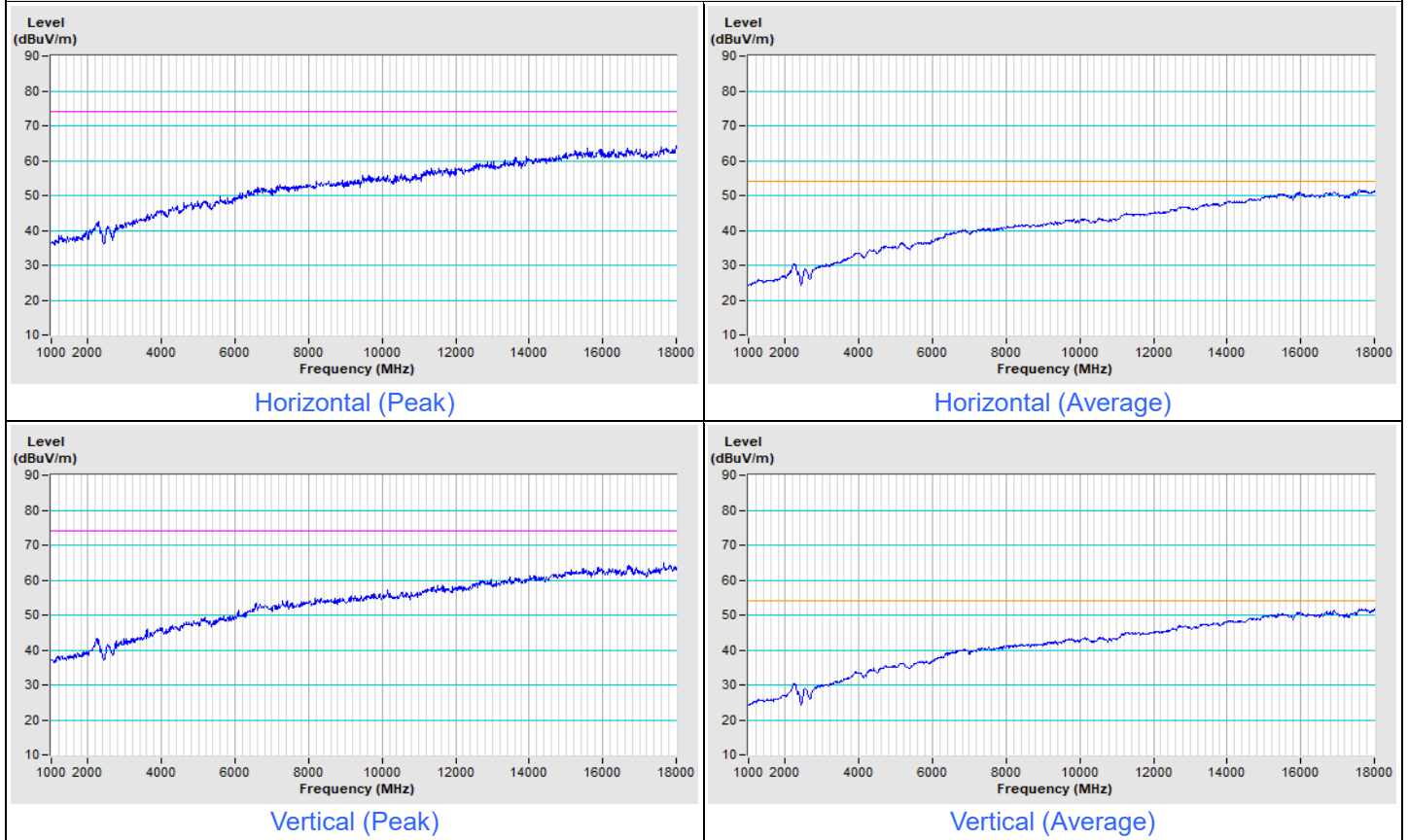


Notes:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 25 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

Frequency Range	1 GHz ~ 18 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 6

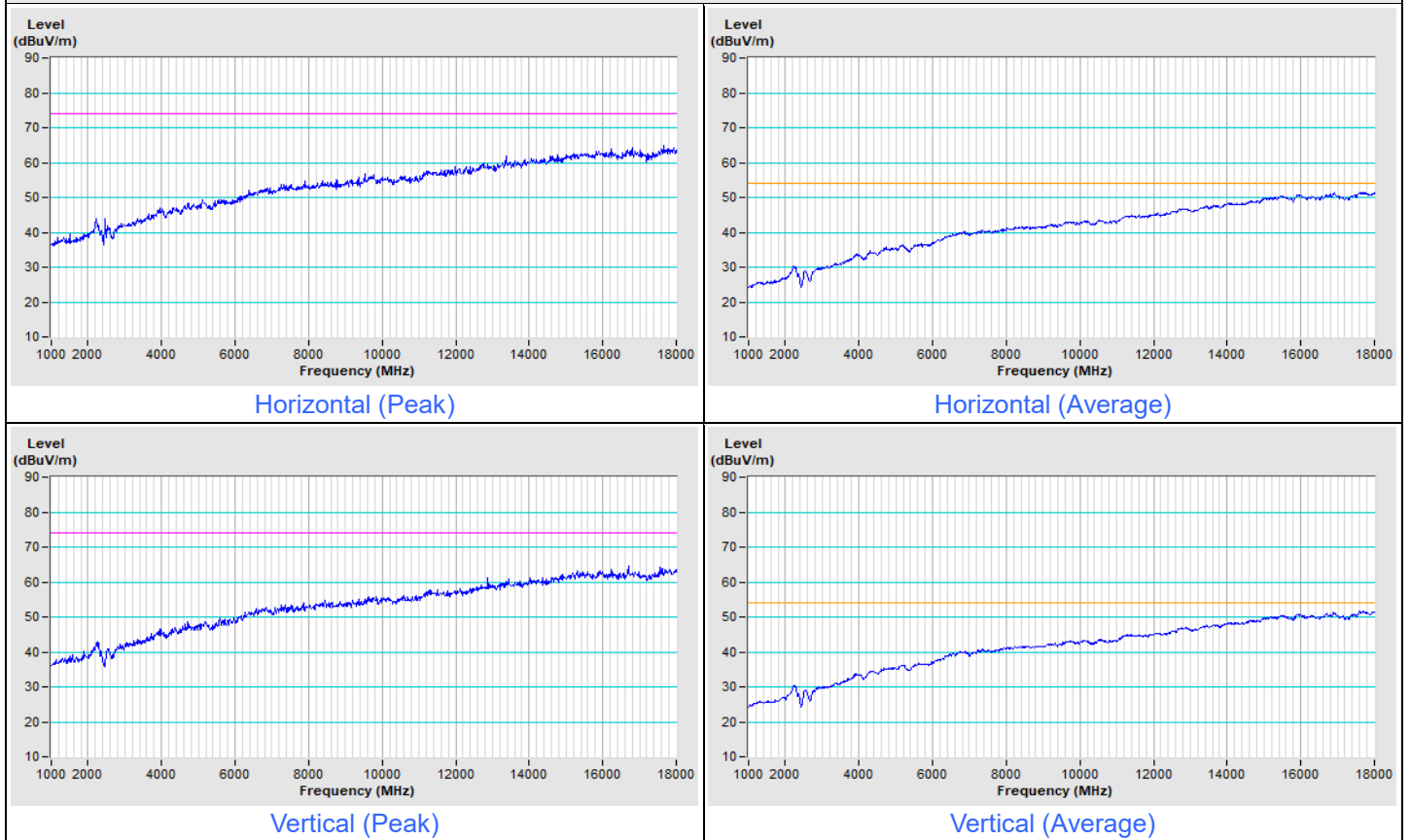


Notes:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 25 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

Frequency Range	1 GHz ~ 18 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 6

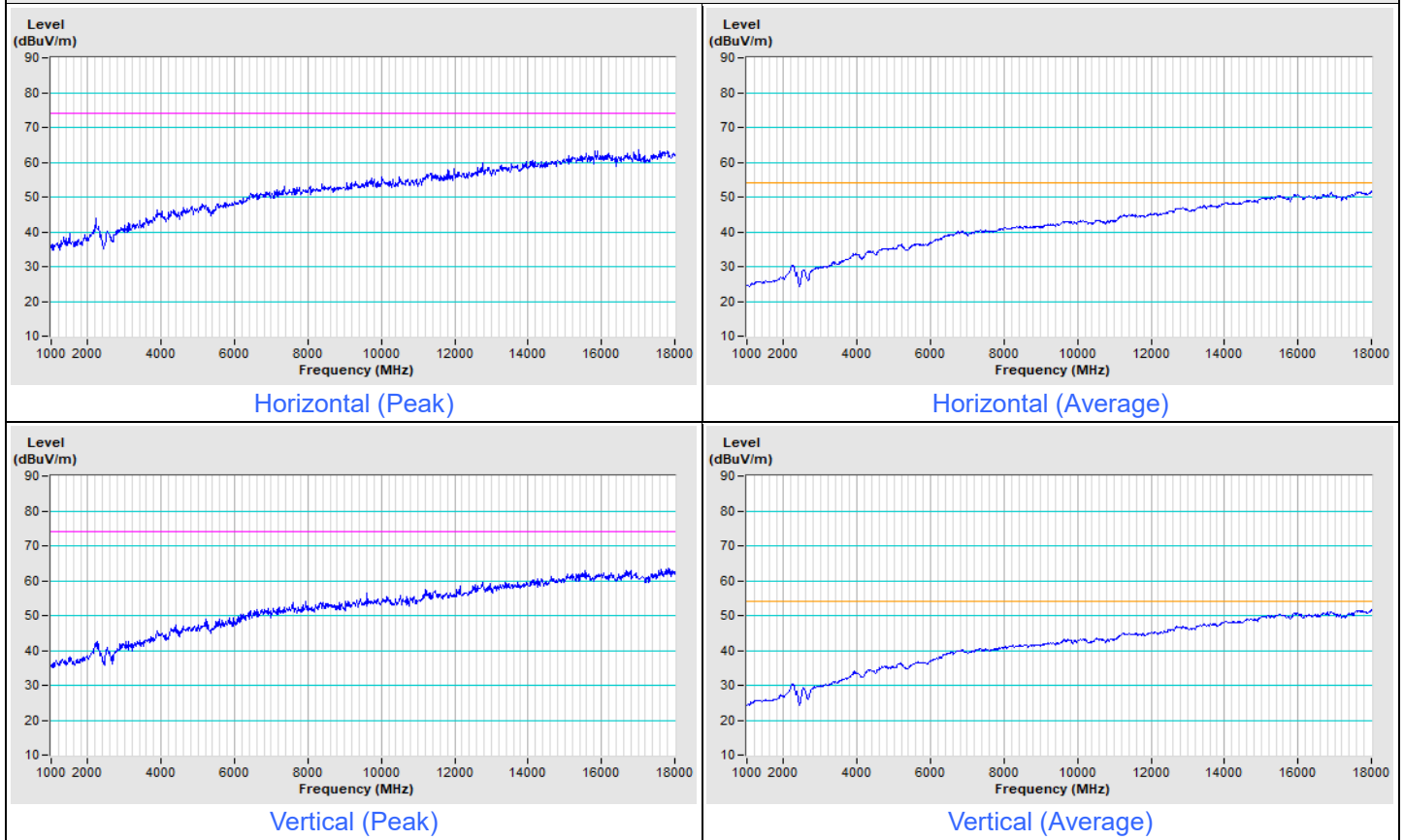


Notes:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 25 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

Frequency Range	1 GHz ~ 18 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 6



Notes:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 25 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

9 Information of the Testing Laboratories

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

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

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Web Site: <http://ee.bureauveritas.com.tw>

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

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