

FCC TEST REPORT

For
Shenzhen Hysentel Technology Co., Ltd.

In Wall Wireless Access Point
Model No.: IWN2000_US

Test Report Number : ESTSZ120801209F



EST COMPLIANCE LABORATORY LIMITED
4/F, 7th Building, Xinyuan Industrial Park, Xinguang Road,
Xili, Nanshan District, Shenzhen 518055, China
Tel:+86-755-26648640 Fax:+86-755-26648637

TABLE OF CONTENTS

1 - GENERAL INFORMATION	4
1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	4
1.2 TEST STANDARDS	5
1.3 TEST SUMMARY	5
1.4 TEST METHODOLOGY	6
1.5 TEST FACILITY	6
1.5 TEST EQUIPMENT LIST AND DETAILS	7
2 - TEST PROCEDURE	8
3 DISTURBANCE VOLTAGE AT THE MAINS TERMINALS	9
3.1 MEASUREMENT UNCERTAINTY	9
3.2 REQUIREMENTS (15.207):	9
3.3 EUT SETUP	9
3.4 INSTRUMENT SETUP	9
3.5 TEST PROCEDURE	10
3.6 SUMMARY OF TEST RESULTS	10
3.7 DISTURBANCE VOLTAGE TEST DATA	10
3.8 TEST RESULTS	10
4- 6 DB BANDWIDTH	13
4.1 REQUIREMENTS (15.247(A)):	13
4.2 TEST SETUP	13
4.3 TEST PROCEDURE	13
4.4 TEST RESULTS	13
4.5 TEST DATA	14
5- MAXIMUM PEAK CONDUCTED OUTPUT POWER	15
5.1 REQUIREMENTS (15.247(B)):	15
5.2 TEST SETUP	15
5.3 TEST PROCEDURE	15
5.4 TEST RESULTS	15
5.5 TEST DATA	16
6- SPURIOUS RADIATED EMISSION	17
6.1 REQUIREMENTS (15.247(B)):	17
6.2 TEST SETUP	17
6.3 TEST PROCEDURE	19
6.4 TEST RESULTS	19
6.5 TEST DATA	20
6.5.1 8022.11B TEST MODE	20
6.5.2 8022.11G TEST MODE	23
6.5.2 8022.11N TEST MODE	26
7- SPURIOUS RF CONDUCTED EMISSIONS	29
7.1 REQUIREMENTS (15.247(D)):	29
7.2 TEST SETUP	29
7.3 TEST PROCEDURE	29
7.4 TEST RESULTS	29
7.5 TEST DATA	30
8- 100KHZ BANDWIDTH OF FREQUENCY BAND EDGES	31
8.1 REQUIREMENTS (15.247(D)):	31
8.2 TEST SETUP	31
8.3 TEST PROCEDURE	31
8.4 TEST RESULTS	31
8.5 TEST DATA	32
9- PEAK POWER SPECTRAL DENSITY	33
9.2 TEST SETUP	33

9.3 TEST PROCEDURE 33

9.4 TEST RESULTS 33

9.5 TEST DATA..... 34

APPENDIX A - EUT PHOTOGRAPHS..... 35

EUT - FRONT VIEW 35

EUT - BACK VIEW 35

EUT - BACK VIEW 36

EUT - BACK VIEW 36

EUT - INSIDE VIEW 37

EUT - INSIDE VIEW 37

EUT - INSIDE VIEW 38

EUT - INSIDE VIEW 38

EUT - INSIDE VIEW 39

APPENDIX B. TEST SETUP PHOTOGRAPHS 40

CONDUCTED EMISSION..... 40

RADIATED EMISSION 40

1 - GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: Shenzhen Hysentel Technology Co., Ltd.
 Address of applicant: Room 1201, Unit B, Tower No.1, Fuyuan Commercial Center, No.117, Fanshen Road, Bao'an, Shenzhen, China
 Manufacturer: GREATCOM TECHNOLOGY CO., LTD
 Address of manufacturer: B Building 4Floor, Baoshi Technology Park, Baoshi Road, Shiyan Town, Bao'an District, Shenzhen, China

General Description of E.U.T

EUT Description: In Wall Wireless Access Point
 Trade Name: Hysentel
 Model No.: IWN2000_US
 Test Model: IWN2000_US
 Rating: DC 48-52V Via Adapter
 Test Power Supply: AC 120V/60Hz
 Frequency: 802.11b/g/n, 2412-2462 MHz (See the table1)

Remark: *The models of EUT are identical except appearance of equipment. Unless otherwise specified, all tests were performed on model IWN2000_US to represent the other similar models.*

Note:

Table1

Channel List					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2412	04	2432	08	2452
01	2417	05	2437	09	2457
02	2422	06	2442	10	2462
03	2427	07	2447		

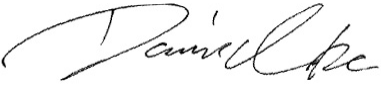
EUT		
Test Channel	EUT Channel	Test Frequency (MHz)
lowest	CH00	2412
middle	CH05	2437
highest	CH10	2462

1.2 Test Standards

The following Declaration of Conformity report of EUT is prepared in accordance with FCC Rules and Regulations Part 15 Subpart C 15.247 15.203 15.205 15.207 15.209: 2008

The objective of the manufacturer is to demonstrate compliance with the described above standards. Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior written consent of EST COMPLIANCE LABORATORY LIMITED.

Date of Test : Aug. 07~Sept. 07, 2012

Prepared by : 
(Engineer: David He)

Reviewer : 
(Project Manager: Ronnie Liu)

Approved & Authorized Signer : 
(Manager: Alex Chen)

1.3 Test Summary

For the EUT described above. The standards used were FCC Part 15 Subpart C for Emissions.

The EUT was tested in accordance to FCC publication KDB558074 Measurement of Digital Transmission Systems Operating under Section 15.247 March 23, 2005

Table 1 : Tests Carried Out Under FCC Part 15 Subpart C

Standard	Test Items	Status
Section 15.207	Conduction Emission, 0.15MHz to 30MHz	√
Section 15.247(a)	Number of Hopping Frequency	×
Section 15.247(a)	Frequency Separation	×
Section 15.247(a)	Dwell Time	×
Section 15.247(a)	Bandwidth	√
Section 15.247(b)(2)	Maximum peak conducted output power	√
Section 15.205	Spurious RF conducted emissions	√
Section 15.209	Spurious radiated Emission	√
Section 15.247(c)	Band Edges	√
Section 15.247(e)	Power spectral density	√

- √ Indicates that the test is applicable
 × Indicates that the test is not applicable

1.4 Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2003, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the Operating Instructions.

The maximum emission levels emanating from the device are compared to the FCC Part 15 Subpart C limits for radiation emissions and the measurement results contained in this test report show that EUT is to be technically compliant with FCC requirements.

Global United Technology Service Co., Ltd at 2nd Floor, Block No.2, Laodong Industrial Zone,Xixiang Road, Baoan District, Shenzhen, China

1.5 Test Facility

All measurement required was performed at laboratory of Global United Technology Service Co., Ltd at 2nd Floor, Block No.2, Laodong Industrial Zone,Xixiang Road, Baoan District, Shenzhen, China

The test facility is recognized, certified, or accredited by the following organizations:

FCC – Registration No.: 600491

Global United Technology Service Co., Ltd has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 600491.

The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2003.

1.5 Test Equipment List and Details

Test equipments list of Global United Technology Service Co., Ltd

Equipment	Manufacturer	Model#	Serial #	Data of Cal.	Due Data
3m Semi-Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)*6.4(H)	GTS201	Mar. 30 2012	Mar. 30 2013
Control Room	ZhongYu Electron	6.2(L)*2.5(W)*2.4(H)	GTS202	N/A	N/A
EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	Sept. 10 2011	Sept. 10 2012
EMI Test Software	AUDIX	E3	N/A	N/A	N/A
Coaxial Cable	GTS	N/A	GTS400	Apr. 01 2012	Apr. 01 2013
Coaxial Cable	GTS	N/A	GTS401	Apr. 01 2012	Apr. 01 2013
Coaxial Cable	GTS	N/A	GTS402	Apr. 01 2012	Apr. 01 2013
Coaxial Cable	GTS	N/A	GTS407	Apr. 01 2012	Apr. 01 2013
Coaxial Cable	GTS	N/A	GTS408	Apr. 01 2012	Apr. 01 2013
BiConiLog Antenna (26-3000MHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS204	Feb. 26 2012	Feb. 26 2013
Pre-amplifier(0.1-3000MHz)	HP	8347A	GTS210	Aug. 03 2011	Aug. 03 2012
Double-ridged horn (1-18GHz)	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS205	Feb. 26 2012	Feb. 26 2013
Pre-amplifier(1-18GHz)	Rohde & Schwarz	8349B	GTS224	Aug. 03 2011	Aug. 03 2012
Humidity/Temperature Indicator	Shanghai	ZJ1-2B	GTS250	Oct. 28 2011	Oct. 28 2012
Barometer	ChangChun	DYM3	GTS251	Feb. 26 2012	Feb. 26 2013
Shielding Room	ZhongYu Electron	7.0(L)*3.0(W)*3.0(H)	GTS206	Apr. 10 2012	Apr. 10 2013
EMI Test Receiver	Rohde & Schwarz	ESCS30	GTS208	Sept. 14 2011	Sept. 14 2013
10dB Pulse Limiter	Rohde & Schwarz	N/A	GTS209	Sept. 14 2011	Sept. 14 2012
LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	GTS207	Apr. 14 2012	Apr. 14 2013
Coaxial Cable	GTS	N/A	GTS406	Apr. 01 2012	Apr. 01 2013
Loop Antenna	ETS-Lindgren	6502	00082431	Apr. 14 2012	Apr. 14 2013

2 - Test Procedure

GENERAL: This report shall NOT be reproduced except in full without the written approval of EST Compliance Laboratory Limited. The EUT was transmitting a test signal during the testing.

RADIATION INTERFERENCE: The test procedure used was ANSI STANDARD C63.4-2003 using a spectrum analyzer with a pre-selector. The analyzer was calibrated in dB above a microvolt at the output of the antenna. The resolution bandwidth was 100KHz and the video bandwidth was 300KHz up to 1.0GHz and 1.0MHz with a video BW of 3.0MHz above 1.0GHz. The ambient temperature of the EUT was 74.3oF with a humidity of 69%.

FORMULA OF CONVERSION FACTORS: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dBuV) to the antenna correction factor supplied by the antenna manufacturer. The antenna correction factors are stated in terms of dB. The gain of the Preselector was accounted for in the Spectrum Analyzer Meter Reading.

Example:

Freq (MHz) METER READING + ACF = FS
33 20 dBuV + 10.36 dB = 30.36 dBuV/m @ 3m

ANSI STANDARD C63.4-2003 10.1.7 MEASUREMENT PROCEDURES: The EUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m. The EUT was placed in the center of the table (1.5m side). The table used for radiated measurements is capable of continuous rotation. When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes.

3 DISTURBANCE VOLTAGE AT THE MAINS TERMINALS

3.1 Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, and LISN.

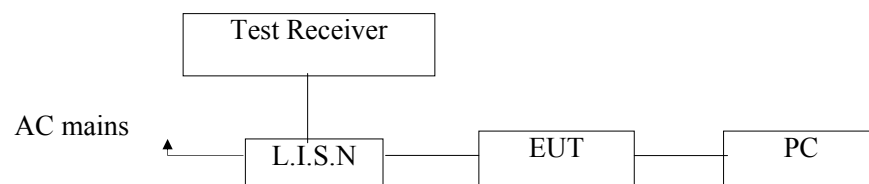
The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement is ± 2.4 dB.

3.2 Requirements (15.207):

Frequency Range (MHz)	Limits (dBuV)	
	Quasi-Peak	Average
0.150~0.500	66~56	56~46
0.500~5.000	56	46
5.000~30.00	60	50

Note: (1)The tighter limit shall apply at the edge between two frequency bands.

3.3 EUT Setup



The EUT was placed center and the back edge of the test table.

The spacing between the peripherals was 10 cm.

Maximum emission emitted from EUT was determined by manipulating the EUT, support equipment, interconnecting cables and varying the mode of operation and the levels in the final result of the test were recorded with the EUT running in the operating mode that maximum emission was emitted.

3.4 Instrument Setup

The test receiver was set with the following configurations:

Test Receiver Setting:

Frequency Range.....150 KHz to 30 MHz
 Detector.....Peak & Quasi-Peak & Average
 Sweep Speed.....Auto
 IF Band Width.....9 KHz

3.5 Test Procedure

During the conducted emission test, the EUT power cord was connected to the auxiliary outlet of the first Artificial Mains.

Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance using all installation combination.

All data was recorded in the peak detection mode. Quasi-peak and Average readings were only performed when an emission was found to be marginal (within -10 dB μ V of specification limits). Quasi-peak readings are distinguished with a "**QP**". Average readings are distinguished with a "**AV**".

3.6 Summary of Test Results

According to the data in section 3.6, the EUT complied with the FCC Part 15 Subpart B Conducted margin, with the *worst* margin reading of:

3.7 Disturbance Voltage Test Data

Temperature (°C)	26
Humidity (%RH)	58
Barometric Pressure (mbar)	1001.1
EUT	In Wall Wireless Access Point
M/N	IWN2000_US
Operating Mode	Standby

Test data see following pages.

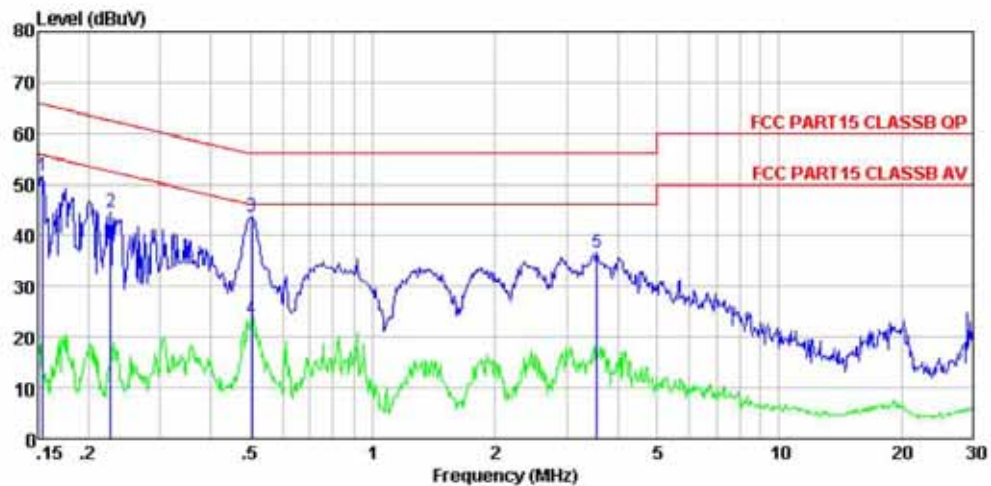
Remark: (1) When PK reading is less than relevant limit 20dB, the QP reading and AV reading will not be recorded.
 (2) Where QP reading is less than relevant AV limit, the AV reading will not be measured

3.8 Test Results

PASS.

Please refer the following pages.

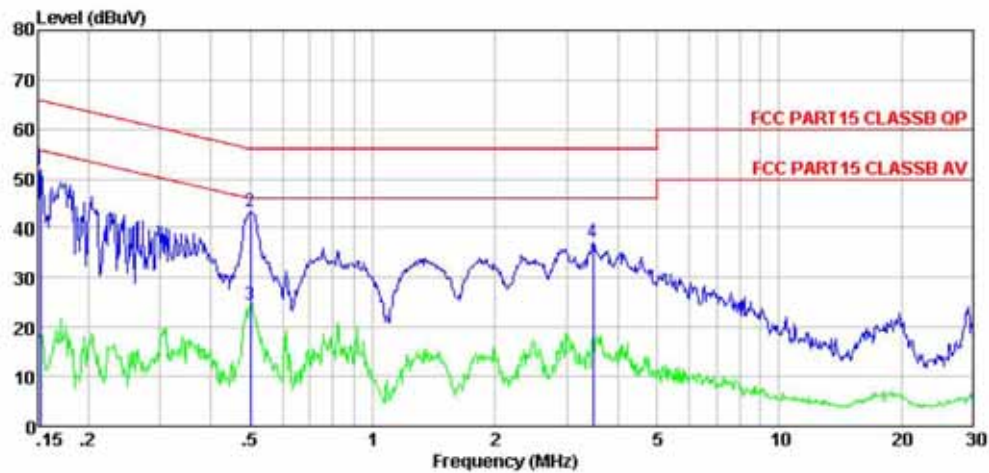
Conducted Emission Test Data



Condition : FCC PART15 CLASSB QP LISN-2012 NEUTRAL
 EUT : Zn Wall wire less access dpoint
 Model : IWNZ000_EU
 Test Load : Standby
 Power : AC 120V/60Hz
 Test Engineer: David

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.154	51.75	-0.13	0.10	51.72	65.78	-14.06	QP
2	0.227	44.56	-0.09	0.10	44.57	62.57	-18.00	QP
3	0.505	43.56	-0.08	0.10	43.58	56.00	-12.42	QP
4	0.505	23.56	-0.08	0.10	23.58	46.00	-22.42	Average
5	3.565	36.74	-0.14	0.10	36.70	56.00	-19.30	QP

Conducted Emission Test Data



Condition : FCC PART15 CLASSB QP LISN-2012 LINE
 EUT : Zn Wall wire less access doint
 Model : IWNZ000_EU
 Test Load : Standby
 Power : AC 120V/60Hz
 Test Engineer: David

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.152	52.24	-0.26	0.10	52.08	65.87	-13.79	QP
2	0.499	43.49	-0.21	0.10	43.38	56.01	-12.63	QP
3	0.499	24.49	-0.21	0.10	24.38	46.01	-21.63	Average
4	3.491	37.43	-0.27	0.10	37.26	56.00	-18.74	QP

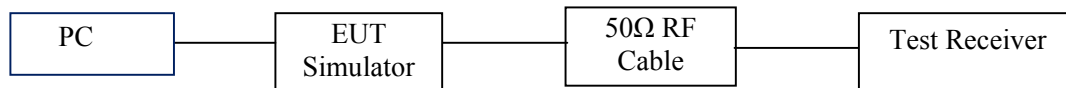
4- 6 dB Bandwidth

4.1 Requirements (15.247(a)):

According to FCC Part 15 C, Section 15.247(a)

Systems using digital modulation techniques may operate in the 902-928MHz, 2400-2483.5MHz, and 5725-5850 MHz bands. The minimum 6 bandwidth shall be at least 500KHz.

4.2 Test Setup



4.3 Test Procedure

- Place the EUT on the table and set it in the transmitting mode.
- Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- Set the spectrum analyzer as RBW = 100 kHz, VBW = 300kHz, Span = 40MHz, Sweep = auto. Detector function = peak, Trace = max hold
- Mark the peak frequency and -6dB (upper and lower) frequency.
- Repeat until all the rest channels are investigated.

4.4 Test Results

Pass.

4.5 Test Data

Temperature (°C)	26
Humidity (%RH)	58
Barometric Pressure (mbar)	1001.1
EUT	In Wall Wireless Access Point
M/N	IWN2000_US
Operating Mode	TX

Test data as follows

4.5.1 802.11b Test Mode

Channel	Frequency(MHz)	6dB Bandwidth(MHz)	Limits(kHz)	Result
CH00	2412	7.30	≥ 500	Pass
CH05	2437	7.30	≥ 500	Pass
CH10	2462	7.20	≥ 500	Pass

4.5.2 802.11g Test Mode

Channel	Frequency(MHz)	6dB Bandwidth(MHz)	Limits(kHz)	Result
CH00	2412	14.90	≥ 500	Pass
CH05	2437	14.80	≥ 500	Pass
CH10	2462	15.10	≥ 500	Pass

4.5.3 802.11g Test Mode

Channel	Frequency(MHz)	6dB Bandwidth(MHz)	Limits(kHz)	Result
CH00	2412	16.40	≥ 500	Pass
CH05	2437	16.20	≥ 500	Pass
CH10	2462	16.20	≥ 500	Pass

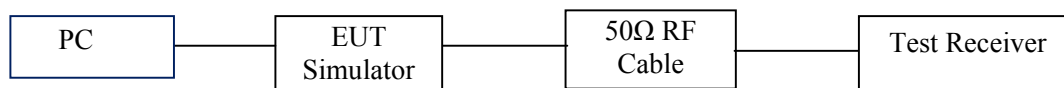
5- Maximum peak conducted output power

5.1 Requirements (15.247(b)):

According to FCC Part 15 C, Section 15.247(b)

For systems using digital modulation in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands: 1 Watt.

5.2 Test Setup



5.3 Test Procedure

- Place the EUT on the table and set it in the transmitting mode.
- Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- Set the spectrum analyzer as RBW = 1MHz, VBW = 3MHz, Span = 50MHz, Sweep = auto. Detector function = peak, Trace = max hold
- Mark the peak power
- Repeat until all the rest channels are investigated.

5.4 Test Results

Pass.

5.5 Test Data

Temperature (°C)	26
Humidity (%RH)	58
Barometric Pressure (mbar)	1001.1
EUT	In Wall Wireless Access Point
M/N	IWN2000_US
Operating Mode	ON

Test data as follows

5.5.1 802.11b Test Mode

Channel	Frequency(MHz)	Output Power(dBm)		Limit		Test Result
		dBm	W	dBm	W	
CH00	2412	15.79	0.038	30	1	Pass
CH05	2437	16.02	0.040	30	1	Pass
CH10	2462	15.91	0.039	30	1	Pass

5.5.2 802.11g Test Mode

Channel	Frequency(MHz)	Output Power(dBm)		Limit		Test Result
		dBm	W	dBm	W	
CH00	2412	13.01	0.020	30	1	Pass
CH05	2437	13.22	0.021	30	1	Pass
CH10	2462	12.78	0.019	30	1	Pass

5.5.2 802.11n Test Mode

Channel	Frequency(MHz)	Output Power(dBm)		Limit		Test Result
		dBm	W	dBm	W	
CH00	2412	10.41	0.011	30	1	Pass
CH05	2437	10.79	0.012	30	1	Pass
CH10	2462	10.41	0.011	30	1	Pass

6- Spurious radiated Emission

6.1 Requirements (15.247(b)):

According to FCC Part 15 C, Section 15.247(b)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required.

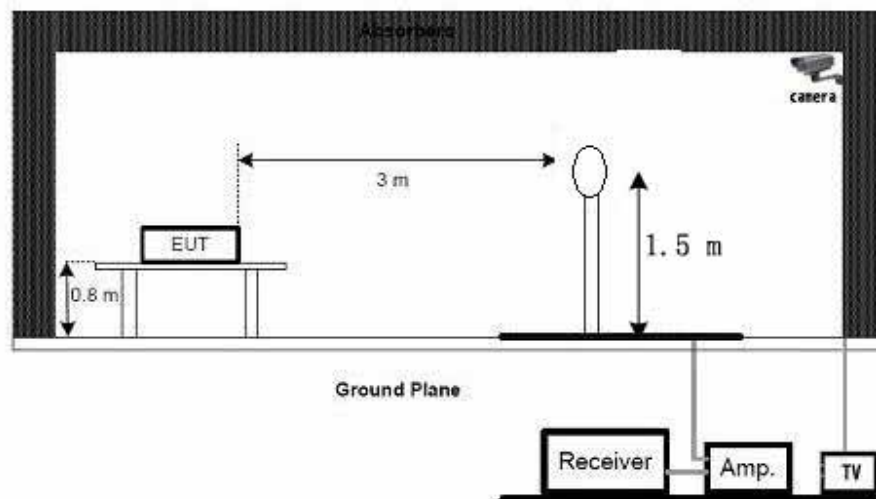
In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a)

15.209(a) – Field Strength Limits within Restricted Frequency Bands

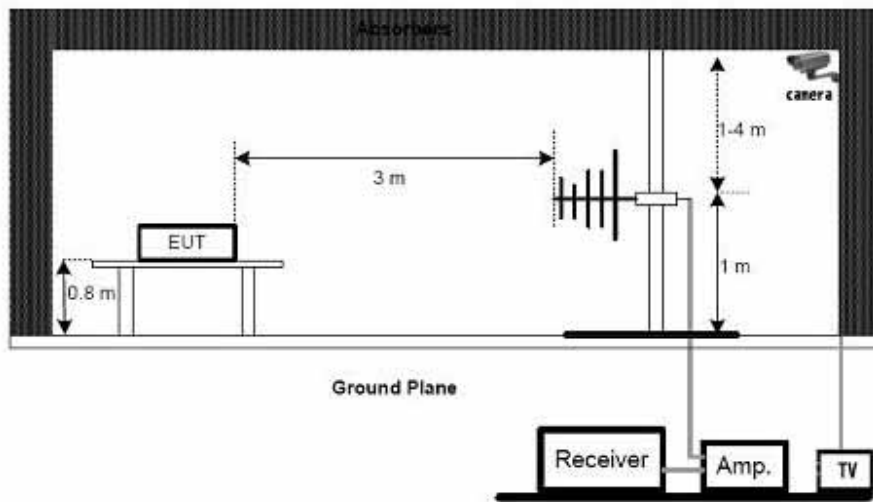
Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100 **	3
88 - 216	150 **	3
216 - 960	200 **	3
Above 960	500	3

6.2 Test Setup

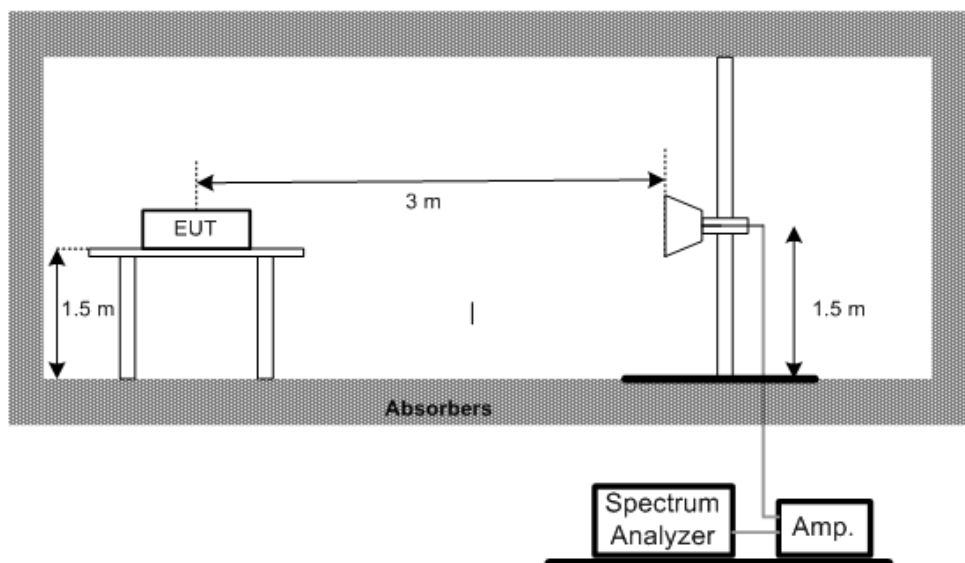
From 9kHz ~ 30MHz



From 30MHz ~ 1GHz



From 1GHz ~ 10GHz



6.3 Test Procedure

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. 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 antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

6.4 Test Results

Pass.

6.5 Test Data

Temperature (°C)	26
Humidity (%RH)	58
Barometric Pressure (mbar)	1001.1
EUT	In Wall Wireless Access Point
M/N	IWN2000_US
Operating Mode	TX

Test data as follows

6.5.1 8022.11b Test Mode

From 9KHz ~ 30MHz:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
12.28	51.40	5.31	0.30	25.56	31.45	69.5	-38.05	QP	-
25.12	56.88	5.65	0.41	25.63	37.31	69.5	-32.19	QP	
28.69	51.67	5.66	0.42	25.67	32.08	69.5	-37.42	QP	-

Emissions attenuated more than 20 dB below the permissible value are not reported.

Data (From 30MHz ~ 1GHz):

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
66.266	47.66	13.92	0.91	31.9	30.59	40.00	-9.41	QP	H
199.986	50.37	13.64	1.84	32.14	33.71	43.50	-9.79	QP	H
601.427	45.21	20.52	3.73	31.6	37.86	46.00	-8.14	QP	H
66.266	42.27	13.92	0.91	31.9	25.2	40.00	-14.8	QP	V
201.393	50.89	13.67	1.85	32.14	34.27	43.50	-9.23	QP	V
400.432	49.47	15.14	2.85	31.89	35.57	46.00	-10.43	QP	V

Emissions attenuated more than 20 dB below the permissible value are not reported.

FCC ID: PT6001

From 1GHz ~ 10GHz):

Data (Above 1GHz to the tenth Harmonic, Average):

CH Low(2412MHz)

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
4824	28.31	31.79	5.34	24.09	41.35	54	-12.65	Average	H
7236	27.02	36.19	6.88	26.41	43.68	54	-10.32	Average	H
9648	20.52	38.07	8.96	25.37	42.18	54	-11.82	Average	H
4824	28.05	31.79	5.34	24.09	41.09	54	-12.91	Average	V
7236	26.86	36.19	6.88	26.41	43.52	54	-10.48	Average	V
9648	20.94	38.07	8.96	25.37	42.6	54	-11.4	Average	V

Note: The 5th-10th harmonic value are too small to be measured.

CH Middle(2437MHz)

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
4874	29.1	31.85	5.4	24.01	42.34	54	-11.66	Average	H
7311	25.36	36.37	6.91	26.62	42.02	54	-11.98	Average	H
9748	20.48	38.35	9.01	25.3	42.54	54	-11.46	Average	H
4874	28.95	31.85	5.4	24.01	42.19	54	-11.81	Average	V
7311	25.37	36.37	6.91	26.62	42.03	54	-11.97	Average	V
9748	20.17	38.35	9.01	25.3	42.23	54	-11.77	Average	V

Note: The 5th-10th harmonic value are too small to be measured.

CH High(2462MHz)

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
4924	30.24	31.91	5.46	23.94	43.67	54	-10.33	Average	H
7386	27.32	36.49	6.93	26.79	43.95	54	-10.05	Average	H
9848	21.07	38.72	9.06	25.24	43.61	54	-10.39	Average	H
4924	29.37	31.91	5.46	23.94	42.8	54	-11.2	Average	V
7386	28.14	36.49	6.93	26.79	44.77	54	-9.23	Average	V
9848	19.68	38.72	9.06	25.24	42.22	54	-11.78	Average	V

Note: The 5th-10th harmonic value are too small to be measured.

FCC ID: PT6001

Data (Above 1GHz to the tenth Harmonic, Peak):

CH Low(2412MHz)

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
4824	37.98	31.79	5.34	24.09	51.02	74	-22.98	Peak	H
7236	39.56	36.19	6.88	26.41	56.22	74	-17.78	Peak	H
9648	31.53	38.07	8.96	25.37	53.19	74	-20.81	Peak	H
4824	38.57	31.79	5.34	24.09	51.61	74	-22.39	Peak	V
7236	38.14	36.19	6.88	26.41	54.8	74	-19.2	Peak	V
9648	33.28	38.07	8.96	25.37	54.94	74	-19.06	Peak	V

Note: The 5th-10th harmonic value are too small to be measured.

CH Middle(2437MHz)

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
4874	36.97	31.85	5.4	24.01	50.21	74	-23.79	Peak	H
7311	34.12	36.37	6.91	26.62	50.78	74	-23.22	Peak	H
9748	33.61	38.35	9.01	25.3	55.67	74	-18.33	Peak	H
4874	39.83	31.85	5.4	24.01	53.07	74	-20.93	Peak	V
7311	34.25	36.37	6.91	26.62	50.91	74	-23.09	Peak	V
9748	33.11	38.35	9.01	25.3	55.17	74	-18.83	Peak	V

Note: The 5th-10th harmonic value are too small to be measured.

CH High(2462MHz)

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
4924	40.29	31.91	5.46	23.94	53.72	74	-20.28	Peak	H
7386	36.82	36.49	6.93	26.79	53.45	74	-20.55	Peak	H
9848	32.18	38.72	9.06	25.24	54.72	74	-19.28	Peak	H
4924	39.28	31.91	5.46	23.94	52.71	74	-21.29	Peak	V
7386	37.35	36.49	6.93	26.79	53.98	74	-20.02	Peak	V
9848	30.82	38.72	9.06	25.24	53.36	74	-20.64	Peak	V

Note: The 5th-10th harmonic value are too small to be measured.

6.5.2 8022.11g Test Mode

From 9KHz ~ 30MHz:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
12.20	52.33	5.30	0.30	25.55	32.38	69.5	-37.12	QP	-
24.98	55.31	5.64	0.40	25.62	35.73	69.5	-33.77	QP	
29.01	53.69	5.67	0.42	25.68	34.10	69.5	-35.40	QP	-

Emissions attenuated more than 20 dB below the permissible value are not reported.

From 30MHz ~ 1GHz:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
66.258	46.34	13.92	0.91	31.9	29.27	40.00	-10.73	QP	H
199.900	45.39	13.64	1.84	32.14	28.73	43.50	-14.77	QP	H
600.427	42.51	20.51	3.72	31.5	35.24	46.00	-10.76	QP	H
72.084	45.88	12.59	0.96	31.85	27.58	40	-12.42	QP	V
200.121	48.66	13.64	1.84	32.14	32	43.5	-11.5	QP	V
601.044	41.73	20.52	3.73	31.04	34.94	46	-11.06	QP	V

Emissions attenuated more than 20 dB below the permissible value are not reported.

FCC ID: PT6001

From 1GHz ~ 25GHz:

Data (Above 1GHz to the tenth Harmonic, Average):

CH Low(2412MHz)

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
4824	26.24	31.79	5.34	24.09	39.28	54	-14.72	Average	H
7236	25.39	36.19	6.88	26.41	42.05	54	-11.95	Average	H
9648	20.18	38.07	8.96	25.37	41.84	54	-12.16	Average	H
4824	27.23	31.79	5.34	24.09	40.27	54	-13.73	Average	V
7236	26.89	36.19	6.88	26.41	43.55	54	-10.45	Average	V
9648	20.93	38.07	8.96	25.37	42.59	54	-11.41	Average	V

Note: The 5th-10th harmonic value are too small to be measured.

CH Middle(2437MHz)

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
4874	25.36	31.85	5.4	24.01	38.6	54	-15.4	Average	H
7311	23.87	36.37	6.91	26.62	40.53	54	-13.47	Average	H
9748	20.34	38.35	9.01	25.3	42.4	54	-11.6	Average	H
4874	26.79	31.85	5.4	24.01	40.03	54	-13.97	Average	V
7311	23.41	36.37	6.91	26.62	40.07	54	-13.93	Average	V
9748	20.48	38.35	9.01	25.3	42.54	54	-11.46	Average	V

Note: The 5th-10th harmonic value are too small to be measured.

CH High(2462MHz)

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
4924	27.28	31.91	5.46	23.94	40.71	54	-13.29	Average	H
7386	24.91	36.49	6.93	26.79	41.54	54	-12.46	Average	H
9848	21.54	38.72	9.06	25.24	44.08	54	-9.92	Average	H
4924	27.68	31.91	5.46	23.94	41.11	54	-12.89	Average	V
7386	26.34	36.49	6.93	26.79	42.97	54	-11.03	Average	V
9848	20.52	38.72	9.06	25.24	43.06	54	-10.94	Average	V

Note: The 5th-10th harmonic value are too small to be measured.

FCC ID: PT6001

Data (Above 1GHz to the tenth Harmonic, Peak):

CH Low(2412MHz)

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
4824	37.98	31.79	5.34	24.09	51.02	74	-22.98	Peak	H
7236	39.56	36.19	6.88	26.41	56.22	74	-17.78	Peak	H
9648	31.53	38.07	8.96	25.37	53.19	74	-20.81	Peak	H
4824	37.56	31.79	5.34	24.09	50.6	74	-23.4	Peak	V
7236	37.14	36.19	6.88	26.41	53.8	74	-20.2	Peak	V
9648	32.63	38.07	8.96	25.37	54.29	74	-19.71	Peak	V

Note: The 5th-10th harmonic value are too small to be measured.

CH Middle(2437MHz)

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
4874	35.24	31.85	5.4	24.01	48.48	74	-25.52	Peak	H
7311	33.71	36.37	6.91	26.62	50.37	74	-23.63	Peak	H
9748	32.25	38.35	9.01	25.3	54.31	74	-19.69	Peak	H
4874	38.44	31.85	5.4	24.01	51.68	74	-22.32	Peak	V
7311	33.68	36.37	6.91	26.62	50.34	74	-23.66	Peak	V
9748	32.49	38.35	9.01	25.3	54.55	74	-19.45	Peak	V

Note: The 5th-10th harmonic value are too small to be measured.

CH High(2462MHz)

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
4924	39.58	31.91	5.46	23.94	53.01	74	-20.99	Peak	H
7386	35.21	36.49	6.93	26.79	51.84	74	-22.16	Peak	H
9848	31.2	38.72	9.06	25.24	53.74	74	-20.26	Peak	H
4924	37.42	31.91	5.46	23.94	50.85	74	-23.15	Peak	V
7386	36.21	36.49	6.93	26.79	52.84	74	-21.16	Peak	V
9848	30.27	38.72	9.06	25.24	52.81	74	-21.19	Peak	V

Note: The 5th-10th harmonic value are too small to be measured.

6.5.2 8022.11n Test Mode

From 9KHz ~ 30MHz:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
12.25	51.89	5.30	0.30	25.54	31.95	69.5	-37.55	QP	-
25.00	56.91	5.64	0.40	25.62	37.33	69.5	-32.17	QP	
28.55	54.27	5.66	0.41	25.68	34.66	69.5	-34.84	QP	-

Emissions attenuated more than 20 dB below the permissible value are not reported.

From 30MHz ~ 1GHz:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
67.354	46.33	13.93	0.93	31.90	29.29	40	-10.71	QP	H
200.112	46.20	13.65	1.85	32.16	29.54	43.5	-13.96	QP	H
599.236	41.35	20.5	3.71	31.49	34.07	46	-11.93	QP	H
71.998	46.02	12.58	0.95	31.84	27.71	40	-12.29	QP	V
199.457	47.93	13.63	1.84	32.15	31.25	43.5	-12.25	QP	V
602.314	40.59	20.53	3.74	31.03	33.83	46	-12.17	QP	V

Emissions attenuated more than 20 dB below the permissible value are not reported.

FCC ID: PT6001

From 1GHz ~ 25GHz:

Data (Above 1GHz to the tenth Harmonic, Average):

CH Low(2412MHz)

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
4824	24.99	31.79	5.34	24.09	38.03	54	-15.97	Average	H
7236	25.03	36.19	6.88	26.41	41.69	54	-12.31	Average	H
9648	19.87	38.07	8.96	25.37	41.53	54	-12.47	Average	H
4824	26.39	31.79	5.34	24.09	39.43	54	-14.57	Average	V
7236	26.01	36.19	6.88	26.41	42.67	54	-11.33	Average	V
9648	20.12	38.07	8.96	25.37	41.78	54	-12.22	Average	V

Note: The 5th-10th harmonic value are too small to be measured.

CH Middle(2437MHz)

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
4874	24.58	31.85	5.4	24.01	37.82	54	-16.18	Average	H
7311	23.17	36.37	6.91	26.62	39.83	54	-14.17	Average	H
9748	20.18	38.35	9.01	25.3	42.24	54	-11.76	Average	H
4874	26.03	31.85	5.4	24.01	39.27	54	-14.73	Average	V
7311	22.88	36.37	6.91	26.62	39.54	54	-14.46	Average	V
9748	19.93	38.35	9.01	25.3	41.99	54	-12.01	Average	V

Note: The 5th-10th harmonic value are too small to be measured.

CH High(2462MHz)

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
4924	26.22	31.91	5.46	23.94	39.65	54	-14.35	Average	H
7386	24.45	36.49	6.93	26.79	41.08	54	-12.92	Average	H
9848	20.35	38.72	9.06	25.24	42.89	54	-11.11	Average	H
4924	26.31	31.91	5.46	23.94	39.74	54	-14.26	Average	V
7386	25.95	36.49	6.93	26.79	42.58	54	-11.42	Average	V
9848	19.37	38.72	9.06	25.24	41.91	54	-12.09	Average	V

Note: The 5th-10th harmonic value are too small to be measured.

FCC ID: PT6001

Data (Above 1GHz to the tenth Harmonic, Peak):

CH Low(2412MHz)

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
4824	35.21	31.79	5.34	24.09	48.25	74	-25.75	Peak	H
7236	34.99	36.19	6.88	26.41	51.65	74	-22.35	Peak	H
9648	28.54	38.07	8.96	25.37	50.2	74	-23.8	Peak	H
4824	36.48	31.79	5.34	24.09	49.52	74	-24.48	Peak	V
7236	35.29	36.19	6.88	26.41	51.95	74	-22.05	Peak	V
9648	31.27	38.07	8.96	25.37	52.93	74	-21.07	Peak	V

Note: The 5th-10th harmonic value are too small to be measured.

CH Middle(2437MHz)

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
4874	35.67	31.85	5.4	24.01	48.91	74	-25.09	Peak	H
7311	34.65	36.37	6.91	26.62	51.31	74	-22.69	Peak	H
9748	31.49	38.35	9.01	25.3	53.55	74	-20.45	Peak	H
4874	37.34	31.85	5.4	24.01	50.58	74	-23.42	Peak	V
7311	33.68	36.37	6.91	26.62	50.34	74	-23.66	Peak	V
9748	31.47	38.35	9.01	25.3	53.53	74	-20.47	Peak	V

Note: The 5th-10th harmonic value are too small to be measured.

CH High(2462MHz)

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark	Direction (H/V)
4924	35.26	31.91	5.46	23.94	48.69	74	-25.31	Peak	H
7386	33.94	36.49	6.93	26.79	50.57	74	-23.43	Peak	H
9848	31.89	38.72	9.06	25.24	54.43	74	-19.57	Peak	H
4924	36.49	31.91	5.46	23.94	49.92	74	-24.08	Peak	V
7386	31.29	36.49	6.93	26.79	47.92	74	-26.08	Peak	V
9848	30.45	38.72	9.06	25.24	52.99	74	-21.01	Peak	V

Note: The 5th-10th harmonic value are too small to be measured.

7- Spurious RF conducted emissions

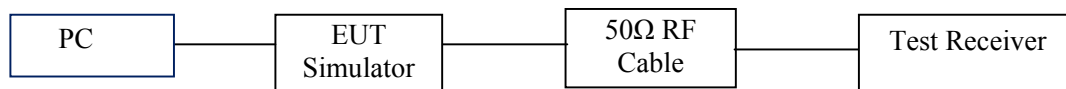
7.1 Requirements (15.247(d)):

According to FCC Part 15 C, Section 15.247(d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required.

In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

7.2 Test Setup



7.3 Test Procedure

- Place the EUT on the table and set it in the transmitting mode.
- Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- Set the spectrum analyzer as RBW = 100kHz, VBW = 300kHz, Sweep = auto, Detector function = peak, Trace = max hold
- Mark the peak power
- Repeat until all the rest channels are investigated.

7.4 Test Results

Pass.

7.5 Test Data

Temperature (°C)	26
Humidity (%RH)	58
Barometric Pressure (mbar)	1001.1
EUT	In Wall Wireless Access Point
M/N	IWN2000_US
Operating Mode	ON

Test data as follows

Test Frequency 30MHz-25GHz

7.5.1 802.11b Test Mode

Channel	Frequency(MHz)	Measured Max. Out of band Emission (dBm)	Limit(dBm)		Test Result
			Carrier level	Calculated -20dBm Limit	
CH00	2412	-37.25	10.56	-9.44	Pass
CH05	2437	-36.67	10.09	-9.91	Pass
CH10	2462	-38.56	9.89	-10.11	Pass

7.5.2 802.11g Test Mode

Channel	Frequency(MHz)	Measured Max. Out of band Emission (dBm)	Limit(dBm)		Test Result
			Carrier level	Calculated -20dBm Limit	
CH00	2412	-40.18	7.42	-12.58	Pass
CH05	2437	-39.36	6.89	-13.11	Pass
CH10	2462	-40.82	6.97	-13.03	Pass

7.5.3 802.11n Test Mode

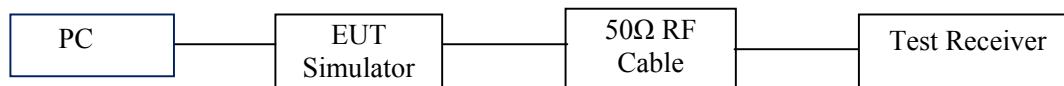
Channel	Frequency(MHz)	Measured Max. Out of band Emission (dBm)	Limit(dBm)		Test Result
			Carrier level	Calculated -20dBm Limit	
CH00	2412	-41.24	3.89	-16.11	Pass
CH05	2437	-42.18	4.07	-15.93	Pass
CH10	2462	-42.79	3.52	-16.48	Pass

8- 100kHz Bandwidth of Frequency Band Edges

8.1 Requirements (15.247(d)):

According to §15.247(c), in any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

8.2 Test Setup



8.3 Test Procedure

- Place the EUT on the table and set it in the transmitting mode.
- Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- Set the spectrum analyzer as RBW = 100kHz, VBW = 300kHz, Span = 10MHz, Sweep = auto.
- The band edges were measured and recorded.

8.4 Test Results

Pass.

8.5 Test Data

Temperature (°C)	26
Humidity (%RH)	58
Barometric Pressure (mbar)	1001.1
EUT	In Wall Wireless Access Point
M/N	IWN2000_US
Operating Mode	TX

Data as follows

8.5.1 802.11b Test Mode

Out of Band Edge Results			
Operating Channel (MHz)	100KHz Band Edge Level(dBm)	20dB Level (dBm)	Margin (dB)
2412	-43.92	-9.44	34.48
2462	-45.13	-10.11	35.02

8.5.1 802.11g Test Mode

Out of Band Edge Results			
Operating Channel (MHz)	100KHz Band Edge Level(dBm)	20dB Level (dBm)	Margin (dB)
2412	-44.05	-12.58	31.47
2462	-45.38	-13.03	32.35

8.5.1 802.11n Test Mode

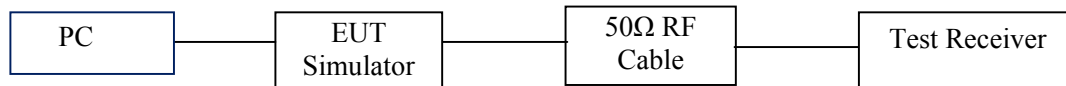
Out of Band Edge Results			
Operating Channel (MHz)	100KHz Band Edge Level(dBm)	20dB Level (dBm)	Margin (dB)
2412	-43.29	-16.11	27.18
2462	-44.81	-16.48	28.33

9- Peak Power Spectral Density

9.1 Requirements

According to the CFR47 Part 15.247 (e), the spectral power density output of the antenna port shall be less than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

9.2 Test Setup



9.3 Test Procedure

- Place the EUT on the table and set it in the transmitting mode.
- Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- Set the spectrum analyzer as RBW = 3kHz, VBW = 30kHz, Span = 1.5MHz, Sweep = 500 seconds.
- The band edges were measured and recorded.

9.4 Test Results

Pass.

9.5 Test Data

Temperature (°C)	26
Humidity (%RH)	58
Barometric Pressure (mbar)	1001.1
EUT	In Wall Wireless Access Point
M/N	IWN2000_US
Operating Mode	TX

Data as follows

9.5.1 802.11b Test Mode

Peak Power Spectral Density			
Operating Channel (MHz)	Limit (dBm)	Test data (dBm)	Margin (dB)
2412	8	-8.82	16.86
2437	8	-7.51	15.51
2462	8	-8.07	16.07

9.5.2 802.11g Test Mode

Peak Power Spectral Density			
Operating Channel (MHz)	Limit (dBm)	Test data (dBm)	Margin (dB)
2412	8	-14.35	22.35
2437	8	-14.98	22.98
2462	8	-15.04	23.04

9.5.3 802.11n Test Mode

Peak Power Spectral Density			
Operating Channel (MHz)	Limit (dBm)	Test data (dBm)	Margin (dB)
2412	8	-15.77	23.77
2437	8	-16.34	24.34
2462	8	-16.49	24.19