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FCC PART 15 SUBPART C TEST REPORT

FCC Part 15.247

Report Reference No.....:	**VITE10016W**
Compiled by (position+printed name+signature)..:	File administrators Andy Zhang
Name of the organization performing the tests (position+printed name+signature)..:	Test Engineer Kendy Wang
Approved by (position+printed name+signature)..:	Manager Tracy Qi
Date of issue.....:	Oct 18, 2010
Representative Laboratory Name .:	**Shenzhen VITE Technology Co., Ltd**
Address.....:	Suite 2123, Building 4, Hongfa Centre, Central Area Baoan, Baoan District, Shenzhen, Guangdong, 518101, P.R. China
Test Firm.....:	**Bontek Compliance Testing Laboratory Ltd**
Address.....:	1/F, Block East H-3, OCT Eastern Ind. Zone, Qiaocheng East Road, Nanshan, Shenzhen, China
Applicant's name.....:	**Newport Wholesale**
Address.....:	11037 Warner AVE#201,Fountain Valley,CA92708,USA
Test specification:	
Standard .....:	FCC Part 15.247: Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz.
TRF Originator.....:	Shenzhen VITE Technology CO., Ltd
Master TRF.....:	Dated 2009-03

Test item description ..... :	Mobile Phone
Trade Mark .....:	MAXWEST
Model/Type reference.....:	WT8000
Listed Models .....:	WT8001, WT8002
Difference description.....:	Only the model name is difference
Modulation .....:	DSSS, OFDM
Work Frequency Range……..:	2412~2462MHz
Antenna Type……:	Internal
FCC ID……..:	YNFWT8000
Result.....:	**Positive**

T E S T R E P O R T

Test Report No. :	VITE10016W	Oct 18, 2010 Date of issue

Equipment under Test	:	Mobile Phone
Model /Type	:	WT8000
Listed Models	:	WT8001, WT8002
Applicant	:	Newport Wholesale
Address	:	11037 Warner AVE#201,Fountain Valley,CA92708,USA
Manufacturer		Newport Wholesale
Address		11037 Warner AVE#201,Fountain Valley,CA92708,USA

Test Result according to the standards on page 4:	**Positive**

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Contents

1. TEST STANDARDS

The tests were performed according to following standards:

FCC Part 15.247: Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz.

ANSI C63.4-2003

KDB Publication No. 558074 Guidance on Measurements for Digital Transmission Systems

2 . SUMMARY

2.1. General Remarks

Date of receipt of test sample : Sep 16, 2010

Testing commenced on : Sep 18, 2010

Testing concluded on : Oct 17, 2010

2.2. Equipment Under Test

Power supply system utilised

Power supply voltage : o 120V / 60 Hz o 115V / 60Hz
o 12 V DC o 24 V DC
● Other (specified in blank below)

DC 3.7V from Battery

2.3. Short description of the Equipment under Test (EUT)

GSM mobile phone with Bluetooth and Wi-fi function.

For more details, refer to the user's manual of the EUT.

Serial number: Prototype

2.4. EUT operation mode

Test Mode:

1. The EUT has been tested under normal operating condition.
2. Test program used to control the EUT for staying in continuous transmitting and receiving mode is programmed.
Channel low (2402MHz), mid (2441MHz) and high (2480MHz) with highest data rate are chosen for full testing.

2.5. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

o - supplied by the manufacturer

o - supplied by the lab

o Manufacturer :
Model No. :

o Manufacturer :
Model No. :

2.6. NOTE

1. The EUT is a 802.11b/g mobile phone ,The functions of the EUT listed as below:

	Test Standards	Reference Report
WLAN 802.11b/g	FCC Part 15 Subpart C (Section15.247)	VITE10016W

2. The frequency bands used in this EUT are listed as follows:

Frequency Band(MHz)	2400-2483.5	5150-5350	5470-5725	5725-5850
802.11b	√	—	—	—
802.11g	√	—	—	—

2.7. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: **YNFWT8000** filing to comply with of the FCC Part 15.247 Rules.

2.8. Modifications

No modifications were implemented to meet testing criteria.

3. TEST ENVIRONMENT

3.1. Address of the test laboratory

Bontek Compliance Testing Laboratory Ltd
1/F, Block East H-3, OCT Eastern Ind. Zone, Qiaocheng East Road, Nanshan, Shenzhen, China

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 (2003) and CISPR Publication 22.

3.2. Test Facility

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

IC Registration No.: 7631A

The 3m alternate test site of Bontek Compliance Testing Laboratory Ltd EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 7631A on March, 2008.

FCC-Registration No.: 338263

Bontek Compliance Testing Laboratory Ltd EMC Laboratory 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 338263, March 24, 2008.

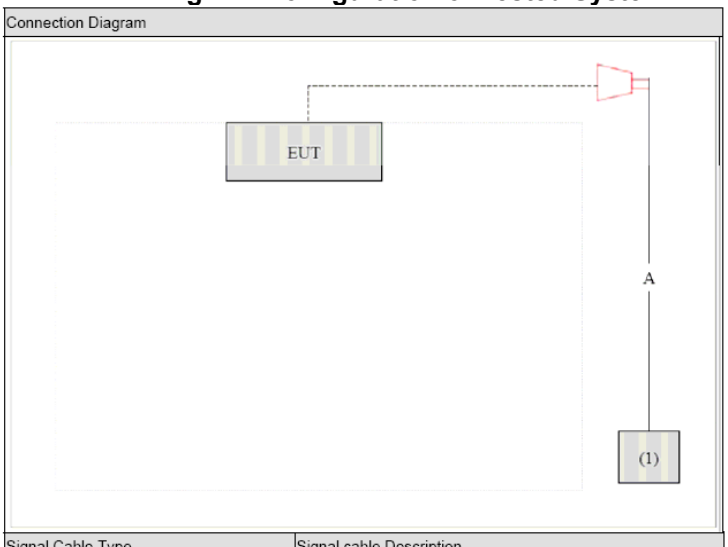
3.3. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15-35 ° C
Humidity:	30-60 %
Atmospheric pressure:	950-1050mbar

3.4. Configuration of Tested System

Fig. 2-1 Configuration of Tested System



Signal Cable Type		Signal cable Description
A	Coaxial Cable	Shielded, >5m

3.5. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 „Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements“ and is documented in the Bontek Compliance Testing Laboratory Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Bontek laboratory is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	4.10dB	(1)
Radiated Emission	1~12.75GHz	4.32dB	(1)
Conducted Disturbance	0.15~30MHz	3.20dB	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3.6. Equipments Used during the Test

Item	Test Equipment	Manufacturer	Model No.	Last Cal.	Due. Date
1	EMI Test Receiver	ROHDE & SCHWARZ	ESCI	2010/04/15	2011/04/14
2	Radio Communication Tester	ROHDE & SCHWARZ	CMU200	2010/04/15	2011/04/14
3	Dual Directional Coupler	Agilent	778D	2010/04/15	2011/04/14
4	10dB attenuator	SCHWARZBECK	MTAIMP-136	2010/04/15	2011/04/14
5	Tunable Bandreject filter	K&L	3TNF-800	2010/04/15	2011/04/14
6	Tunable Bandreject filter	K&L	5TNF-1700	2010/04/15	2011/04/14
7	High-Pass Filter	K&L	9SH10-2700/X12750-O/O	2010/04/15	2011/04/14
8	High-Pass Filter	K&L	41H10-1375/U12750-O/O	2010/04/15	2011/04/14
9	Coaxial Cable	Huber+Suhner	AC4-RF-H	2010/04/15	2011/04/14
10	AC Power Supply	IDRC	CF-500TP	2010/04/15	2011/04/14
11	DC Power Supply	IDRC	CD-035-020PR	2010/04/15	2011/04/14
12	RF Current Probe	FCC	F-33-4	2010/04/15	2011/04/14
13	Temperature /Humidity Meter	zhicheng	ZC1-2	2010/04/15	2011/04/14
14	MICROWAVE AMPLIFIER	HP	8349B	2010/04/15	2011/04/14
15	Amplifier	HP	8447D	2010/04/15	2011/04/14
16	SIGNAL GENERATOR	HP	8647A	2010/04/15	2011/04/14
17	Log Periodic Antenna	ELECTRO-METRICS	EM-6950	2010/04/15	2011/04/14
18	Horn Antenna	Schwarzbeck	BBHA9120A	2010/04/15	2011/04/14
19	EMI Test Receiver	R&S	ESPI	2010/04/15	2011/04/14

3.7. Summary of Test Result

FCC PART 15		
FCC Part 15.207	AC Power Conducted Emission	PASS
FCC Part 15.247(a)(2)	6dB Bandwidth	PASS
FCC Part 15.247(d)	Spurious RF conducted emissions	PASS
FCC Part 15.247(b)	Maximum Peak Output Power	PASS
FCC Part 15.247(e)	Power Spectral Density	PASS
FCC Part 15.109/ 15.205/ 15.209	Radiated Emissions	PASS
FCC Part 15.247(d)	Band edge compliance of RF emissions	PASS

Remark: The measurement uncertainty is not included in the test result.

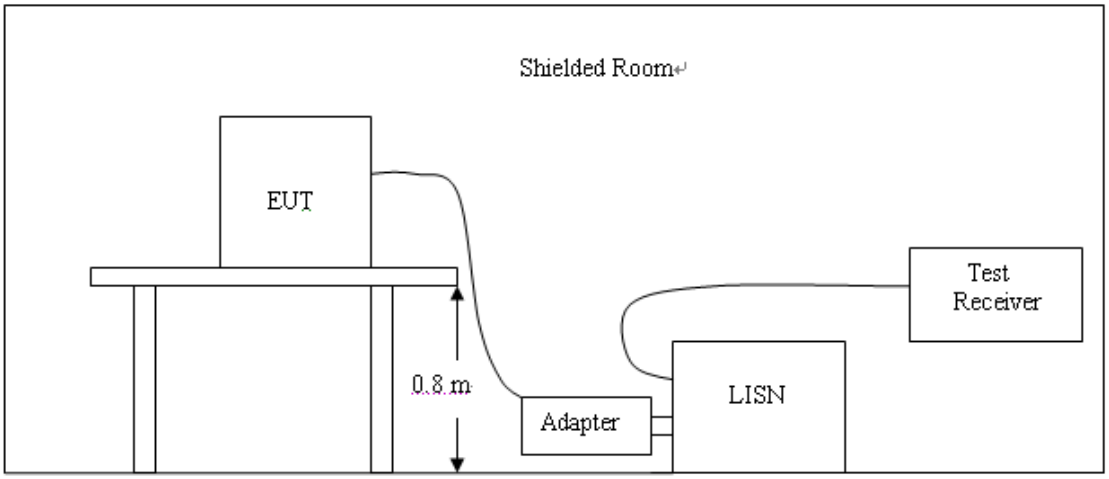
Preliminary tests were performed in different data rate to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode	Data Rate	Channel
AC Power Line Conducted Emissions	Normal Link	11 Mbps	7
Maximum Peak Conducted Output Power Power Spectral Density 6dB Spectrum Bandwidth Spurious RF conducted emissions	11b/DSSS	11 Mbps	1/7/13
	11g/OFDM	54 Mbps	1/7/13
Radiated Emissions 9kHz~1GHz	11b/DSSS	11 Mbps	1/7/13
	11g/OFDM	54 Mbps	1/7/13
Radiated Emissions 1GHz~10th Harmonic	11b/DSSS	11 Mbps	1/7/13
	11g/OFDM	54 Mbps	1/7/13
Band Edge Emissions	11b/DSSS	11 Mbps	1/13
	11g/OFDM	54 Mbps	1/13

4. TEST CONDITIONS AND RESULTS

4.1. Conducted Emissions Test

TEST CONFIGURATION



TEST PROCEDURE

For unintentional device, according to § 15.107(a) Line Conducted Emission Limits is as following：

Frequency (MHz)	Maximum RF Line Voltage (dBμv)			
	CLASS A		CLASS B	
	Q.P.	Ave.	Q.P.	Ave.
0.15 - 0.50	79	66	66-56*	56-46*
0.50 - 5.00	73	60	56	46
5.00 - 30.0	73	60	60	50

* Decreasing linearly with the logarithm of the frequency

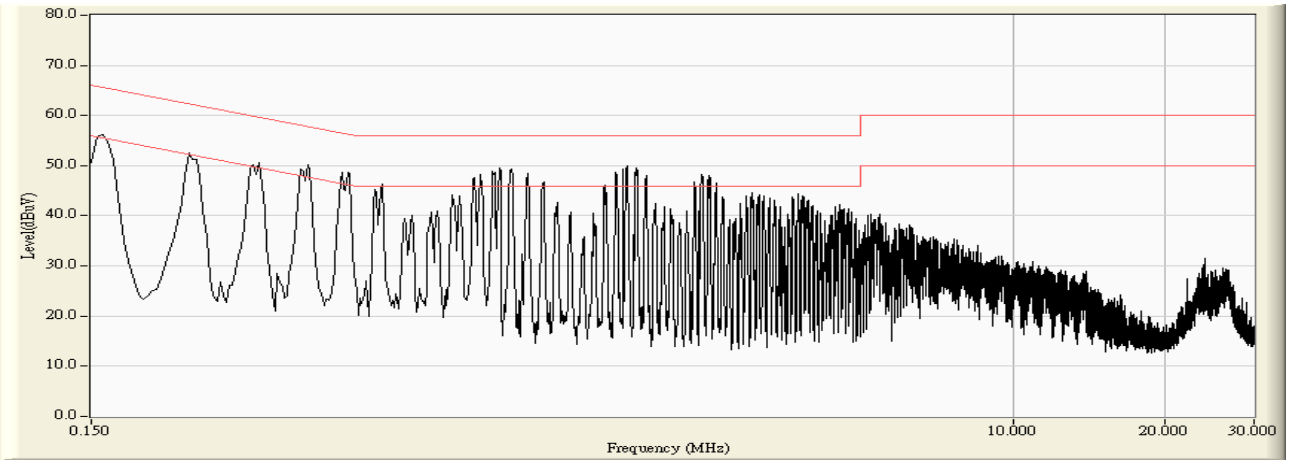
For intentional device, according to §15.207(a) Line Conducted Emission Limit is same as above table.

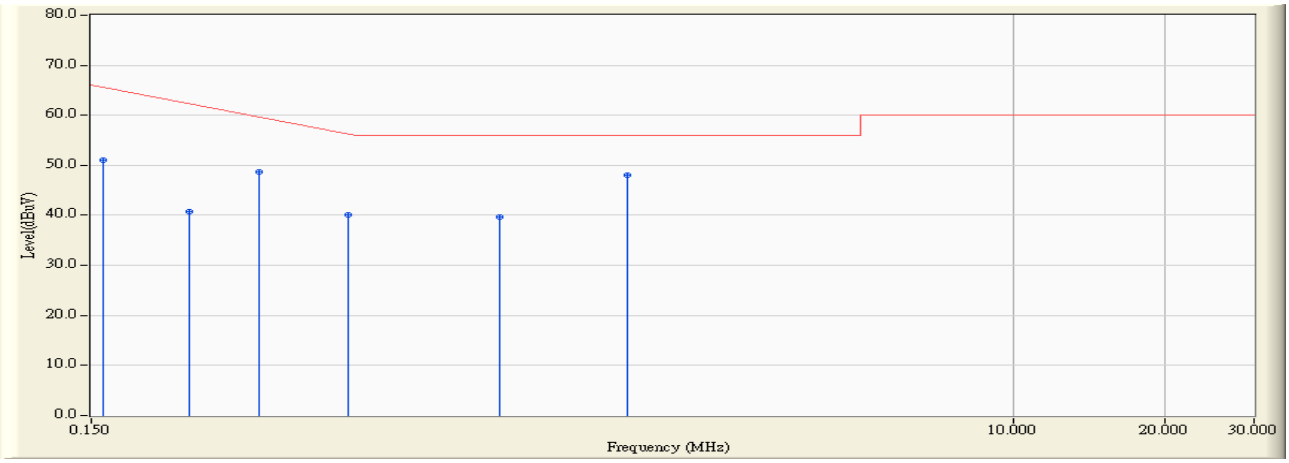
1. Please follow the guidelines in ANSI C63.4-2003.
2. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
3. Connect EUT to the power mains through a line impedance stabilization network (LISN).
4. All the support units are connecting to the other LISN.
5. The LISN provides 50 ohm coupling impedance for the measuring instrument.
6. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
7. Both sides of AC line were checked for maximum conducted interference.
8. The frequency range from 150 kHz to 30 MHz was searched.
9. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

The RBW/VBW for 150KHz to 30MHz: 9KHz

TEST RESULTS

Line 1:

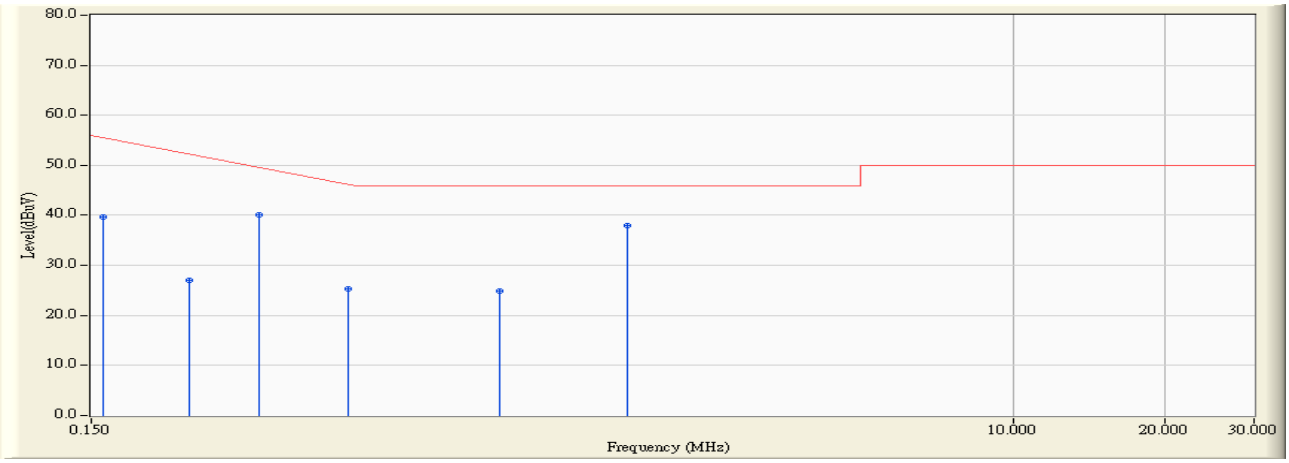




		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	10.214	40.900	51.114	-14.657	65.771	QUASIPEAK
2		0.234	9.450	31.200	40.650	-22.950	63.600	QUASIPEAK
3		0.322	9.519	39.100	48.619	-12.467	61.086	QUASIPEAK
4		0.482	9.615	30.400	40.015	-16.499	56.514	QUASIPEAK
5		0.962	9.728	30.000	39.728	-16.272	56.000	QUASIPEAK
6	*	1.726	9.700	38.300	48.000	-8.000	56.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

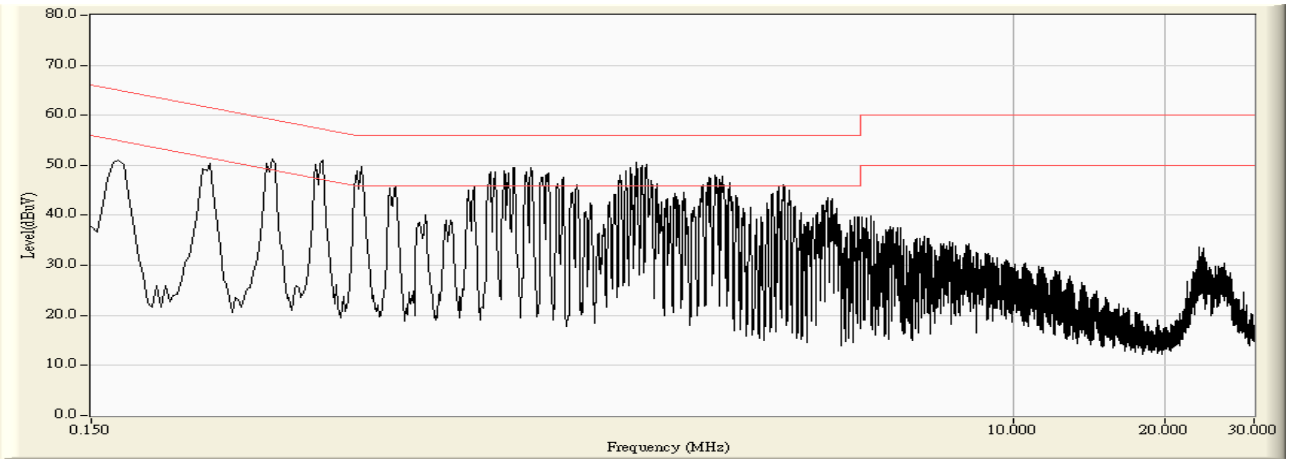


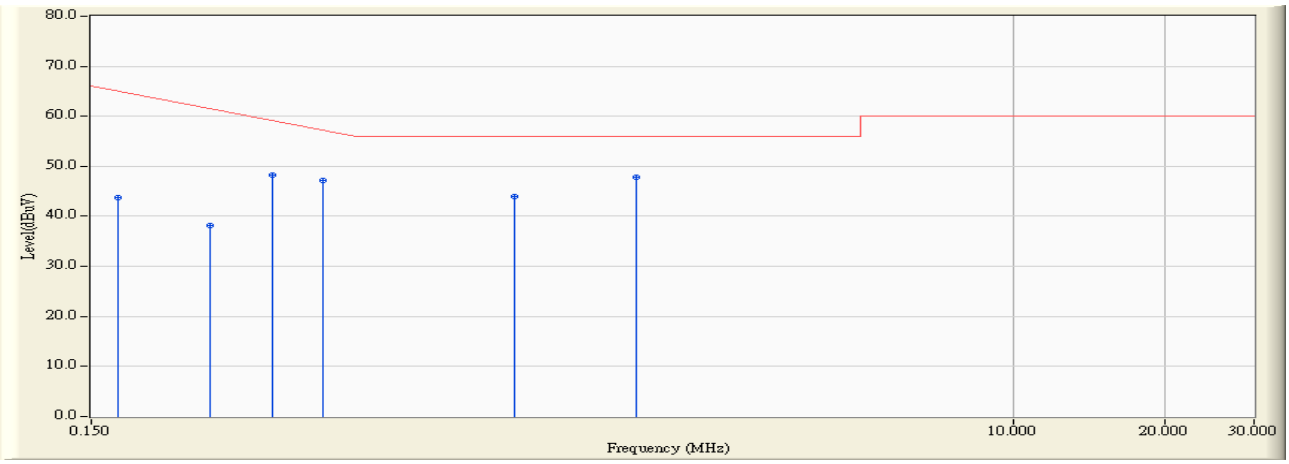
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	10.214	29.400	39.614	-16.157	55.771	AVERAGE
2		0.234	9.450	17.500	26.950	-26.650	53.600	AVERAGE
3		0.322	9.519	30.600	40.119	-10.967	51.086	AVERAGE
4		0.482	9.615	15.600	25.215	-21.299	46.514	AVERAGE
5		0.962	9.728	15.200	24.928	-21.072	46.000	AVERAGE
6	*	1.726	9.700	28.200	37.900	-8.100	46.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Line 2:

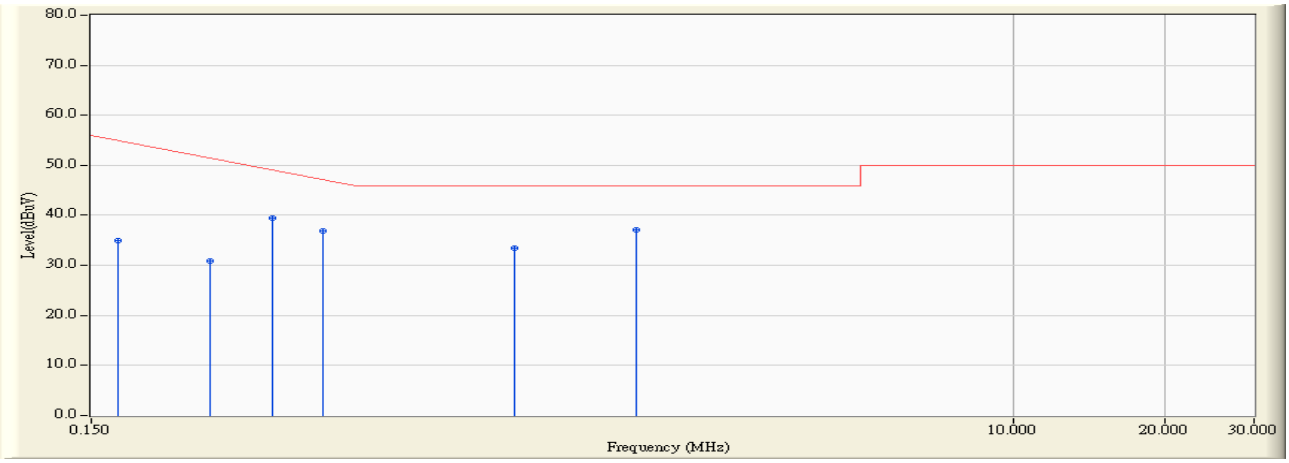




		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.170	9.908	33.800	43.708	-21.721	65.429	QUASIPEAK
2		0.258	9.583	28.600	38.183	-24.731	62.914	QUASIPEAK
3		0.342	9.601	38.700	48.301	-12.213	60.514	QUASIPEAK
4		0.430	9.610	37.500	47.110	-10.890	58.000	QUASIPEAK
5		1.030	9.780	34.200	43.980	-12.020	56.000	QUASIPEAK
6	*	1.802	9.682	38.200	47.882	-8.118	56.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.170	9.908	25.000	34.908	-20.521	55.429	AVERAGE
2		0.258	9.583	21.300	30.883	-22.031	52.914	AVERAGE
3		0.342	9.601	29.800	39.401	-11.113	50.514	AVERAGE
4		0.430	9.610	27.200	36.810	-11.190	48.000	AVERAGE
5		1.030	9.780	23.600	33.380	-12.620	46.000	AVERAGE
6	*	1.802	9.682	27.400	37.082	-8.918	46.000	AVERAGE

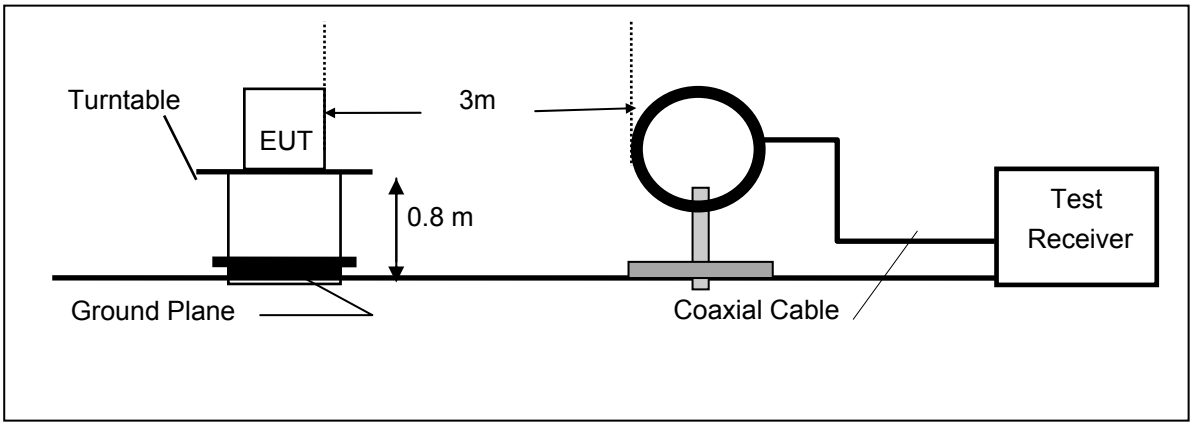
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

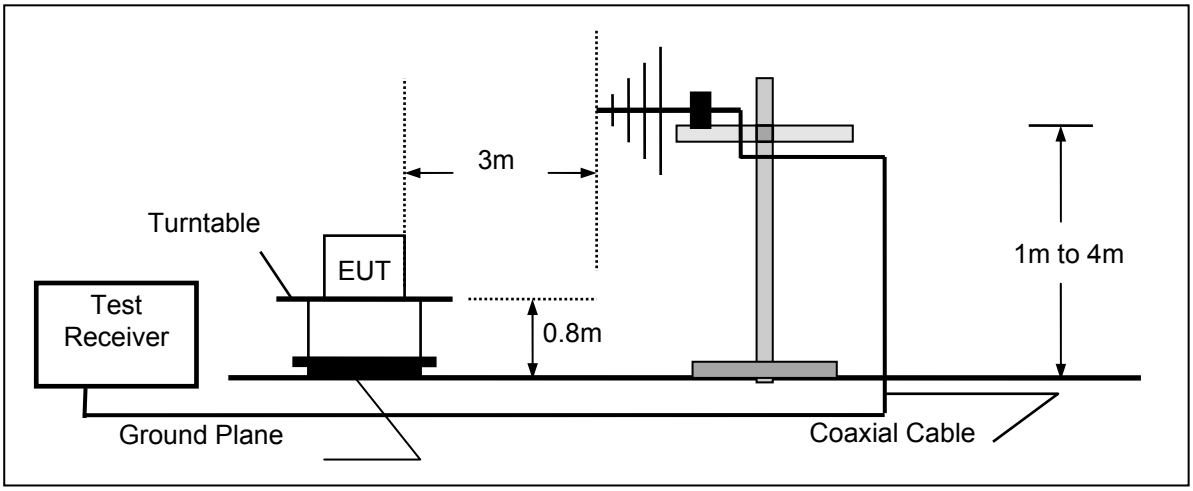
4.2. Radiated Emission Test

TEST CONFIGURATION

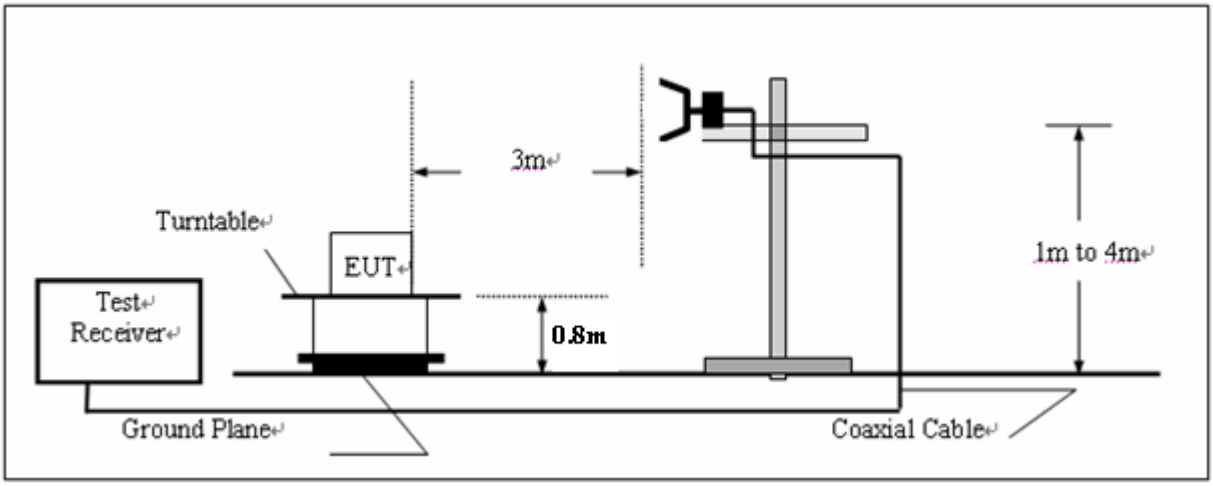
(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



(B) Radiated Emission Test Set-Up, Frequency Below 1000MHz



(C) Radiated Emission Test Set-Up, Frequency above 1000MHz



FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor(if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CL - AG

Where FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude	AG = Amplifier Gain
AF = Antenna Factor	

TEST PROCEDURE

1. The testing follows FCC KDB Publication No. 558074 (Measurement Guidelines of DTS).
2. The EUT was placed on a turn table which is 0.8m above ground plane.
3. Maximum procedure was performed by raising the receiving antenna from 1m to 4m and rotating the turn table from 0℃ to 360℃ to acquire the highest emissions from EUT
4. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
5. Span = wide enough to fully capture the emission being measured; RBW = 1 MHz for f 1 GHz, 100 kHz for f < 1 GHz; VBW RBW; Sweep = auto; Detector function = peak; Trace = max hold.
6. Repeat above procedures until all frequency measurements have been completed.

LIMIT

For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values：

Frequency (MHz)	Distance (Meters)	Radiated (dBμV/m)	Radiated (μV/m)
30-88	3	40.0	100
88-216	3	43.5	150
216-960	3	46.0	200
Above 960	3	54.0	500

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table. According to § 15.247(d), in any 100kHz bandwidth outside the frequency band in which the EUT is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the100kHz bandwidth within the band that contains the highest level of desired power.

TEST RESULTS

Below 1GHz:

Vertical

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)
119.24	1.25	7.93	27.70	52.71	34.19	43.50	-9.31
149.31	1.32	8.91	27.46	50.22	32.99	43.50	-10.51
334.58	2.02	15.04	26.98	42.45	32.53	46.00	-13.47
498.51	2.59	17.80	27.70	41.89	34.58	46.00	-11.42
629.46	2.76	20.52	27.51	42.52	38.29	46.00	-7.71
796.30	3.19	22.08	26.95	36.85	35.17	46.00	-10.83

Horizontal

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)
148.34	1.32	8.86	27.47	46.96	29.67	43.50	-13.83
206.54	1.44	10.52	27.12	44.09	28.93	43.50	-14.57
299.66	1.90	13.85	26.72	48.39	37.42	46.00	-8.58
382.11	2.15	16.08	27.30	43.71	34.64	46.00	-11.36
629.46	2.76	20.52	27.51	40.62	36.39	46.00	-9.61
797.27	3.20	22.09	26.95	37.43	35.77	46.00	-10.23

REMARKS：

1. ∗Undetectable

2. The IF bandwidth of EMI Test Receiver was 120KHz for measuring from 30 MHz to 1 GHz and 1 MHz for measuring above 1 GHz

Above 1GHz:

Transmitting mode (802.11b lowest channel=2412MHz)

Peak Measurement

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
1479	3.75	28.23	38.56	61.32	54.74	74.00	-19.26	Vertical
2400	4.97	32.25	37.97	58.73	57.98	74.00	-16.02	Vertical
2472	5.03	32.22	38.05	55.12	54.32	74.00	-19.68	Vertical
4824	6.56	33.94	38.78	49.87	51.59	74.00	-22.41	Vertical
7236	7.75	36.54	37.59	45.58	52.28	74.00	-21.72	Vertical
9648	8.61	37.09	33.41	41.29	53.58	74.00	-20.42	Vertical
1479	3.75	28.23	38.56	60.84	54.26	74.00	-19.74	Horizontal
2400	4.97	32.25	37.97	55.39	54.64	74.00	-19.36	Horizontal
2472	5.03	32.22	38.05	54.38	53.58	74.00	-20.42	Horizontal
4824	6.56	33.94	38.78	48.77	50.49	74.00	-23.51	Horizontal
7236	7.75	36.54	37.59	44.47	51.17	74.00	-22.83	Horizontal
9648	8.61	37.09	33.41	41.29	53.58	74.00	-20.42	Horizontal

Average Measurement

Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Over limit	polarization
1479	3.75	28.23	38.56	52.18	45.60	54.00	-8.40	Vertical
2400	4.97	32.25	37.97	46.28	45.53	54.00	-8.47	Vertical
2472	5.03	32.22	38.05	44.54	43.74	54.00	-10.26	Vertical
4824	6.56	33.94	38.78	42.19	43.91	54.00	-10.09	Vertical
7236	7.75	36.54	37.59	38.23	44.93	54.00	-9.07	Vertical
9648	8.61	37.09	33.41	33.38	45.67	54.00	-8.33	Vertical
1479	3.75	28.23	38.56	51.57	44.99	54.00	-9.01	Horizontal
2400	4.97	32.25	37.97	47.38	46.63	54.00	-7.37	Horizontal
2472	5.03	32.22	38.05	43.37	42.57	54.00	-11.43	Horizontal
4824	6.56	33.94	38.78	40.17	41.89	54.00	-12.11	Horizontal
7236	7.75	36.54	37.59	37.59	44.29	54.00	-9.71	Horizontal
9648	8.61	37.09	33.41	34.17	46.46	54.00	-7.54	Horizontal

Transmitting mode (802.11b middle channel=2437MHz)

Peak Measurement

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
1896	4.58	32.09	38.47	59.73	57.93	74.00	-16.07	Vertical
2400	4.97	32.25	37.97	56.72	55.97	74.00	-18.03	Vertical
2480	5.08	32.28	38.25	55.28	54.39	74.00	-19.61	Vertical
2500	5.10	32.30	38.28	54.17	53.29	74.00	-20.71	Vertical
4874	6.61	34.13	38.92	50.74	52.56	74.00	-21.44	Vertical
7311	7.56	35.95	37.76	46.68	52.43	74.00	-21.57	Vertical
9748	8.70	37.11	33.44	42.14	54.51	74.00	-19.49	Vertical
1896	4.58	32.09	38.47	58.59	56.79	74.00	-17.21	Horizontal
2400	4.97	32.25	37.97	55.18	54.43	74.00	-19.57	Horizontal
2480	5.08	32.28	38.25	54.29	53.40	74.00	-20.60	Horizontal
2500	5.10	32.30	38.28	54.76	53.88	74.00	-20.12	Horizontal
4874	6.61	34.13	38.92	49.38	51.20	74.00	-22.80	Horizontal
7311	7.56	35.95	37.76	47.59	53.34	74.00	-20.66	Horizontal
9748	8.70	37.11	33.44	43.26	55.63	74.00	-18.37	Horizontal

Average Measurement

Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Over limit	polarization
1896	4.58	32.09	38.47	42.17	40.37	54.00	-13.63	Vertical
2400	4.97	32.25	37.97	42.14	41.39	54.00	-12.61	Vertical
2480	5.08	32.28	38.25	42.08	41.19	54.00	-12.81	Vertical
2500	5.10	32.30	38.28	42.15	41.27	54.00	-12.73	Vertical
4874	6.61	34.13	38.92	40.21	42.03	54.00	-11.97	Vertical
7311	7.56	35.95	37.76	38.79	44.54	54.00	-9.46	Vertical
9748	8.70	37.11	33.44	33.49	45.86	54.00	-8.14	Vertical
1896	4.58	32.09	38.47	45.76	43.96	54.00	-10.04	Horizontal
2400	4.97	32.25	37.97	44.21	43.46	54.00	-10.54	Horizontal
2480	5.08	32.28	38.25	43.78	42.89	54.00	-11.11	Horizontal
2500	5.10	32.30	38.28	42.07	41.19	54.00	-12.81	Horizontal
4874	6.61	34.13	38.92	40.35	42.17	54.00	-11.83	Horizontal
7311	7.56	35.95	37.76	39.68	45.43	54.00	-8.57	Horizontal
9748	8.70	37.11	33.44	34.32	46.69	54.00	-7.31	Horizontal

Transmitting mode (802.11b highest channel=2462MHz)

Peak Measurement

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
1785	4.08	29.76	38.50	60.63	55.97	74.00	-18.03	Vertical
2122	4.62	32.08	38.35	56.28	54.63	74.00	-19.37	Vertical
2472	5.03	32.22	38.05	57.49	56.69	74.00	-17.31	Vertical
2483.5	5.08	32.29	38.24	55.11	54.24	74.00	-19.76	Vertical
2495	5.09	32.51	38.42	54.57	53.75	74.00	-20.25	Vertical
4924	6.68	34.12	38.79	50.87	52.88	74.00	-21.12	Vertical
7386	7.48	35.78	37.56	48.18	53.88	74.00	-20.12	Vertical
9848	8.61	37.21	33.59	44.57	56.80	74.00	-17.20	Vertical
1785	4.08	29.76	38.50	60.13	55.47	74.00	-18.53	Horizontal
2122	4.62	32.08	38.35	58.68	57.03	74.00	-16.97	Horizontal
2472	5.03	32.22	38.05	60.15	59.35	74.00	-14.65	Horizontal
2483.5	5.08	32.29	38.24	56.48	55.61	74.00	-18.39	Horizontal
2495	5.09	32.51	38.42	54.68	53.86	74.00	-20.14	Horizontal
4924	6.68	34.12	38.79	49.45	51.46	74.00	-22.54	Horizontal
7386	7.48	35.78	37.56	47.79	53.49	74.00	-20.51	Horizontal
9848	8.61	37.21	33.59	42.74	54.97	74.00	-19.03	Horizontal

Average Measurement

Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Over limit	polarization
1785	4.08	29.76	38.50	48.29	43.63	54.00	-10.37	Vertical
2122	4.62	32.08	38.35	45.18	43.53	54.00	-10.47	Vertical
2472	5.03	32.22	38.05	43.86	43.06	54.00	-10.94	Vertical
2483.5	5.08	32.29	38.24	43.19	42.32	54.00	-11.68	Vertical
2495	5.09	32.51	38.42	42.96	42.14	54.00	-11.86	Vertical
4924	6.68	34.12	38.79	40.19	42.20	54.00	-11.80	Vertical
7386	7.48	35.78	37.56	37.96	43.66	54.00	-10.34	Vertical
9848	8.61	37.21	33.59	32.15	44.38	54.00	-9.62	Vertical
1785	4.08	29.76	38.50	47.29	42.63	54.00	-11.37	Horizontal
2122	4.62	32.08	38.35	46.57	44.92	54.00	-9.08	Horizontal
2472	5.03	32.22	38.05	48.28	47.48	54.00	-6.52	Horizontal
2483.5	5.08	32.29	38.24	45.97	45.10	54.00	-8.90	Horizontal
2495	5.09	32.51	38.42	44.97	44.15	54.00	-9.85	Horizontal
4924	6.68	34.12	38.79	40.15	42.16	54.00	-11.84	Horizontal
7386	7.48	35.78	37.56	39.75	45.45	54.00	-8.55	Horizontal
9848	8.61	37.21	33.59	33.35	45.58	54.00	-8.42	Horizontal

Transmitting mode (802.11g lowest channel=2412MHz)

Peak Measurement

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
1306	3.47	27.66	37.67	55.74	49.20	74.00	-24.80	Vertical
2400	4.97	32.25	37.97	53.27	52.52	74.00	-21.48	Vertical
2472	5.03	32.22	38.05	50.76	50.55	74.00	-23.45	Vertical
4825	6.62	34.03	38.91	47.22	48.96	74.00	-25.04	Vertical
7273	7.61	36.21	37.71	46.54	52.65	74.00	-21.35	Vertical
9534	8.46	36.92	33.87	41.97	53.48	74.00	-20.52	Vertical
1578	3.86	28.56	38.07	58.69	53.04	74.00	-20.96	Horizontal
2400	4.97	32.25	37.97	55.34	54.59	74.00	-19.41	Horizontal
2472	5.03	32.22	38.05	51.98	51.18	74.00	-22.82	Horizontal
4842	6.62	34.03	38.89	47.11	48.87	74.00	-25.13	Horizontal
7222	7.63	36.29	37.72	46.78	52.98	74.00	-21.02	Horizontal
9653	8.55	37.01	33.66	40.26	52.16	74.00	-21.84	Horizontal

Average Measurement

Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Over limit (dB)	polarization
1306	3.47	27.66	37.67	49.82	43.28	54.00	-10.72	Vertical
2400	4.97	32.25	37.97	40.59	39.84	54.00	-14.16	Vertical
2472	5.03	32.22	38.05	43.98	43.18	54.00	-10.82	Vertical
4825	6.62	34.03	38.91	40.18	41.92	54.00	-12.08	Vertical
7273	7.61	36.21	37.71	39.71	45.82	54.00	-8.18	Vertical
9534	8.46	36.92	33.87	35.10	46.61	54.00	-7.39	Vertical
1578	3.86	28.56	38.07	49.68	44.03	54.00	-9.97	Horizontal
2400	4.97	32.25	37.97	46.65	45.90	54.00	-8.10	Horizontal
2472	5.03	32.22	38.05	43.49	42.69	54.00	-11.31	Horizontal
4842	6.62	34.03	38.89	40.21	41.97	54.00	-12.03	Horizontal
7222	7.63	36.29	37.72	39.76	45.96	54.00	-8.04	Horizontal
9653	8.55	37.01	33.66	34.28	46.18	54.00	-7.82	Horizontal

Transmitting mode (802.11g middle channel=2437MHz)

Peak Measurement

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
1896	4.58	32.09	38.47	59.06	57.26	74.00	-16.74	Vertical
2400	4.97	32.25	37.97	56.37	55.62	74.00	-18.38	Vertical
2480	5.08	32.28	38.25	54.54	53.65	74.00	-20.35	Vertical
2500	5.10	32.30	38.28	51.71	50.83	74.00	-23.17	Vertical
4893	6.65	34.02	38.87	44.78	46.58	74.00	-27.42	Vertical
7443	7.52	35.91	37.55	43.15	49.03	74.00	-24.97	Vertical
9806	8.68	37.14	33.40	40.47	52.89	74.00	-21.11	Vertical
1896	4.58	32.09	38.47	58.78	56.98	74.00	-17.02	Horizontal
2400	4.97	32.25	37.97	50.74	49.99	74.00	-24.01	Horizontal
2480	5.08	32.28	38.25	53.64	52.75	74.00	-21.25	Horizontal
2500	5.10	32.30	38.28	51.77	50.89	74.00	-23.11	Horizontal
4876	6.64	34.02	38.88	47.36	49.14	74.00	-24.86	Horizontal
7443	7.52	35.91	37.55	44.73	50.61	74.00	-23.39	Horizontal
9891	8.75	37.21	33.38	39.83	52.41	74.00	-21.59	Horizontal

Average Measurement

Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Over limit (dB)	polarization
1896	4.58	32.09	38.47	44.37	42.57	54.00	-11.43	Vertical
2400	4.97	32.25	37.97	41.59	40.84	54.00	-13.16	Vertical
2480	5.08	32.28	38.25	41.53	40.64	54.00	-13.36	Vertical
2500	5.10	32.30	38.28	43.28	42.40	54.00	-11.60	Vertical
4893	6.65	34.02	38.87	40.10	41.90	54.00	-12.10	Vertical
7443	7.52	35.91	37.55	39.64	45.52	54.00	-8.48	Vertical
9806	8.68	37.14	33.40	35.21	47.63	54.00	-6.37	Vertical
1896	4.58	32.09	38.47	45.34	43.54	54.00	-10.46	Horizontal
2400	4.97	32.25	37.97	40.21	39.46	54.00	-14.54	Horizontal
2480	5.08	32.28	38.25	40.54	39.65	54.00	-14.35	Horizontal
2500	5.10	32.30	38.28	41.86	40.98	54.00	-13.02	Horizontal
4876	6.64	34.02	38.88	40.18	41.96	54.00	-12.04	Horizontal
7443	7.52	35.91	37.55	38.67	44.55	54.00	-9.45	Horizontal
9891	8.75	37.21	33.38	34.96	47.54	54.00	-6.46	Horizontal

Transmitting mode (802.11g highest channel=2462MHz)

Peak Measurement

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
1306	3.47	27.66	37.67	57.88	51.34	74.00	-22.66	Vertical
2472	5.03	32.22	38.05	56.74	55.94	74.00	-18.06	Vertical
2483.5	5.08	32.29	38.24	55.41	54.54	74.00	-19.46	Vertical
2495	5.09	32.51	38.42	53.18	52.36	74.00	-21.64	Vertical
4876	6.64	34.02	38.88	44.80	46.58	74.00	-27.42	Vertical
7545	7.54	35.82	37.45	43.74	49.65	74.00	-24.35	Vertical
9772	8.65	37.12	33.45	40.94	53.26	74.00	-20.74	Vertical
2122	4.62	32.08	38.35	55.27	53.62	74.00	-20.38	Horizontal
2472	5.03	32.22	38.05	54.34	53.54	74.00	-20.46	Horizontal
2484	5.08	32.29	38.24	53.61	52.74	74.00	-21.26	Horizontal
2495	5.09	32.51	38.42	53.78	52.96	74.00	-21.04	Horizontal
4944	6.67	34.01	38.85	47.54	49.37	74.00	-24.63	Horizontal
7443	7.52	35.91	37.55	45.53	51.41	74.00	-22.59	Horizontal
9772	8.65	37.12	33.45	41.48	53.80	74.00	-20.20	Horizontal

Average Measurement

Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Over limit (dB)	polarization
1306	3.47	27.66	37.67	48.58	42.04	54.00	-11.96	Vertical
2472	5.03	32.22	38.05	46.43	45.63	54.00	-8.37	Vertical
2483.5	5.08	32.29	38.24	45.69	44.82	54.00	-9.18	Vertical
2495	5.09	32.51	38.42	44.97	44.15	54.00	-9.85	Vertical
4876	6.64	34.02	38.88	40.16	41.94	54.00	-12.06	Vertical
7545	7.54	35.82	37.45	39.68	45.59	54.00	-8.41	Vertical
9772	8.65	37.12	33.45	35.59	47.91	54.00	-6.09	Vertical
2122	4.62	32.08	38.35	48.68	47.03	54.00	-6.97	Horizontal
2472	5.03	32.22	38.05	47.43	46.63	54.00	-7.37	Horizontal
2484	5.08	32.29	38.24	45.27	44.40	54.00	-9.60	Horizontal
2495	5.09	32.51	38.42	44.73	43.91	54.00	-10.09	Horizontal
4944	6.67	34.01	38.85	39.86	41.69	54.00	-12.31	Horizontal
7443	7.52	35.91	37.55	38.49	44.37	54.00	-9.63	Horizontal
9772	8.65	37.12	33.45	35.56	47.88	54.00	-6.12	Horizontal

The field strength is calculated by adding the Antenna Factor. Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor –Preamplifier Factor.

Remark: No any other emissions level which are attenuated less than 20dB below the limit

According to 15.31(o), The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this Part.

Hence there no other emissions have been reported.

According to 15.31(o), The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this Part.

Hence there no other emissions have been reported.

Remark:

1). As shown in Section, for frequencies above 1000 MHz. the above field strength limits are based on average limits. 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.

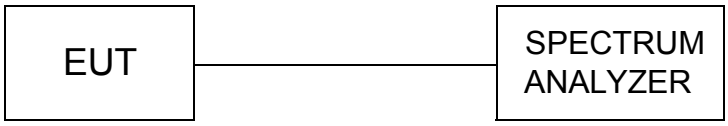
2). The test only perform the EUT in transmitting status since the test frequencies were over 1GHz only required transmitting status.

3) Pre-Scan has been conducted to determine the worst-case mode from all possible Combinations between available modulations, data rates and antenna ports, and found the EUT worse case mode: 802.11b (11MHz), 802.11g (54MHz)

4）For this intentional radiator operates below 25 GHz. The spectrum shall be investigated to the tenth harmonic of the highest fundamental frequency. And above the 4th harmonic of this intentional radiator, the disturbance is very low. So the test result only displays to 4th harmonic.

4.3. 6dB Bandwidth Measurement

TEST CONFIGURATION



TEST PROCEDURE

1. The testing follows FCC KDB Publication No. 558074 (Measurement Guidelines of DTS).
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. In order to make an accurate measurement, set the span greater than RBW. The 6 dB bandwidth must be greater than 500 kHz.
4. The marker-delta reading at this point is the 6 dB bandwidth of the emission.

LIMIT

For digital modulation systems, the minimum 6 dB bandwidth shall be at least 500 kHz.

TEST RESULTS

1. The EUT communicating with 802.11b Mode

CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
2.412	10.00	0.5	Pass
2.437	10.24	0.5	Pass
2.462	10.20	0.5	Pass

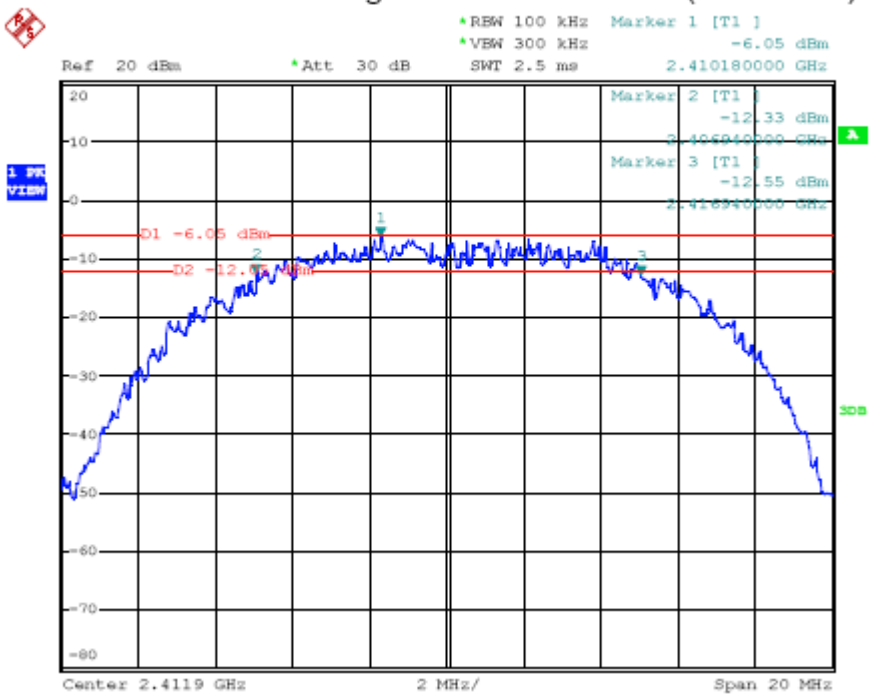
2. The EUT communicating with 802.11g Mode

CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
2.412	16.52	0.5	Pass
2.437	16.52	0.5	Pass
2.462	16.52	0.5	Pass

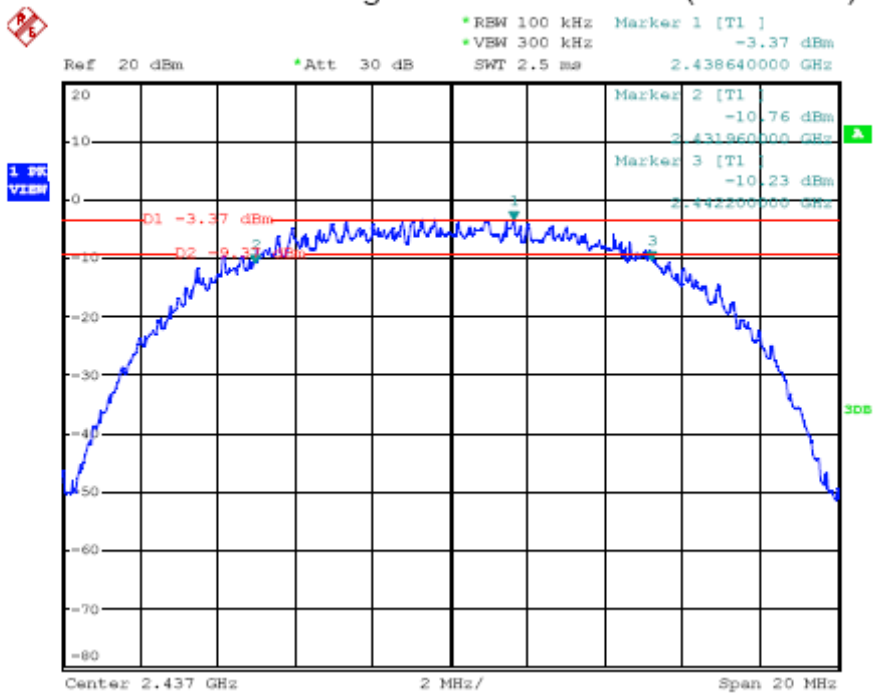
Conclusion: The unit does meet the FCC requirements.

Please refer to the graph as below:

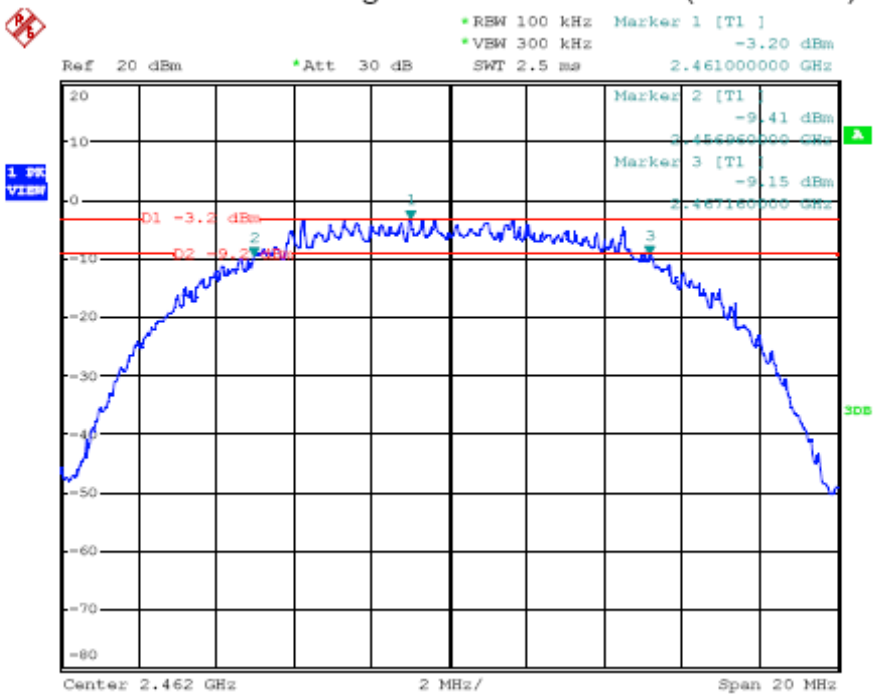
1. For EUT communicating with 802.11b mode (2.412GHz)



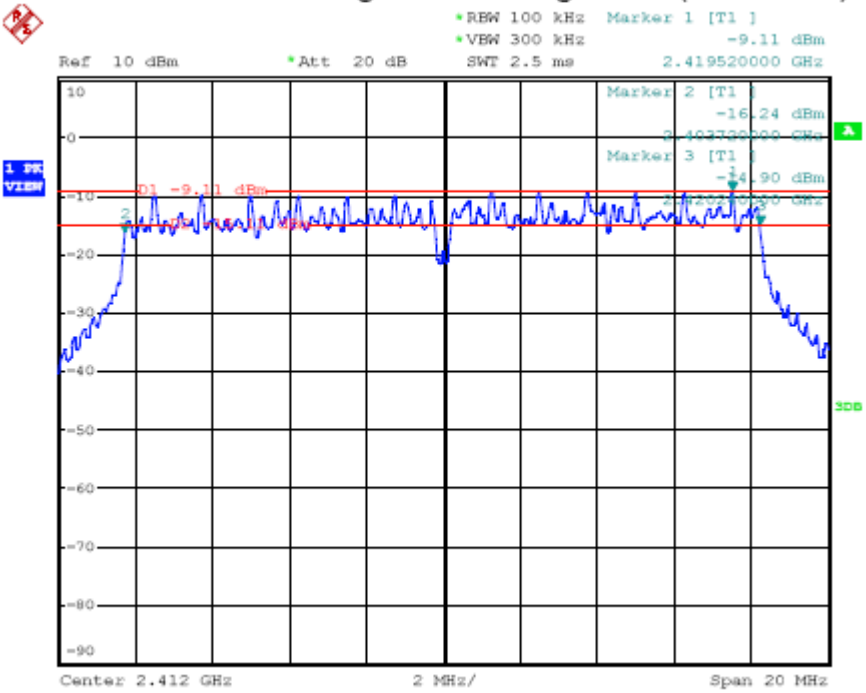
2. For EUT communicating with 802.11b mode (2.437GHz)



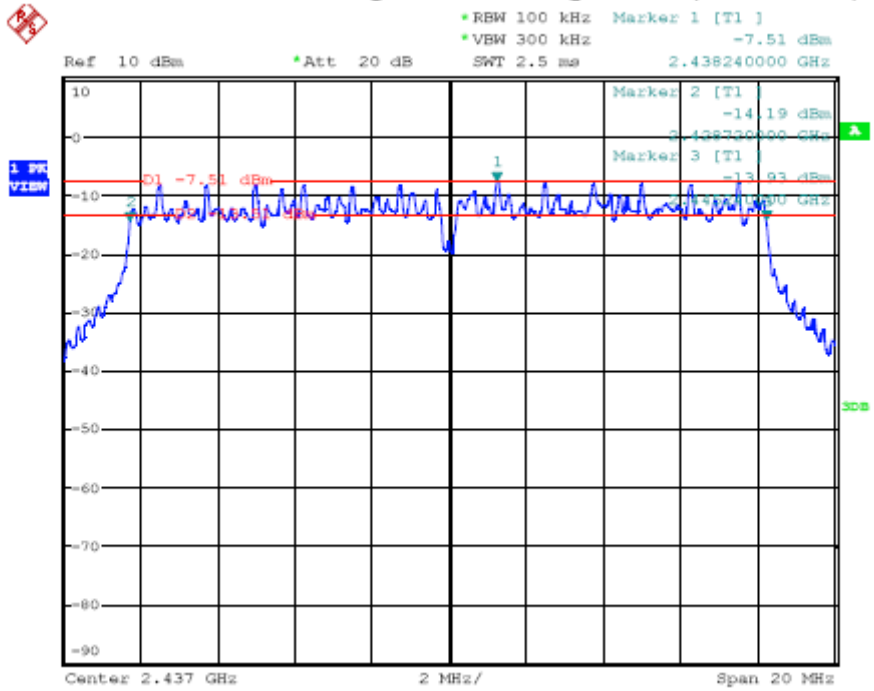
3. For EUT communicating with 802.11b mode (2.462GHz)



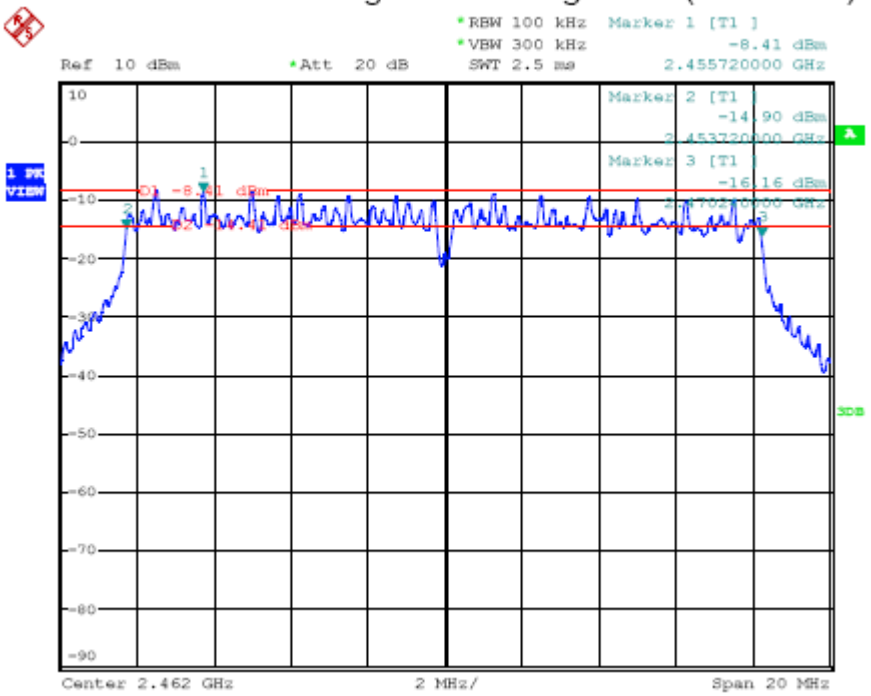
4. For EUT communicating with 802.11g mode (2.412GHz)



5. For EUT communicating with 802.11g mode (2.437GHz)

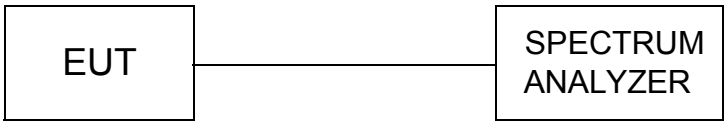


6. For EUT communicating with 802.11g Mode (2.462GHz)



4.4. Maximum Peak Output Power

TEST CONFIGURATION



TEST PROCEDURE

1. The testing follows FCC KDB Publication No. 558074 method #3(Measurement Guidelines of DTS).
2. The spectrum shall be set as follows:

Span : Set span to encompass the entire emission bandwidth (EBW) of the signal.

RBW : 1MHz

VBW : 1MHz

Detector : Peak

Sweep : Single trace

Compute the combined power of all signal responses contained in the trace by covering all the data points.

3. For 99% occupied BW, place the markers at the frequency at which 0.5% of the power lies to the right of the right marker and 0.5% of the power lies to the left of the left marker.
4. The peak output power is the channel power integrated over 99% bandwidth.

LIMIT

The Peak Output Power Measurement limits are 30dBm.

TEST RESULTS

For EUT communicating with 802.11b Mode

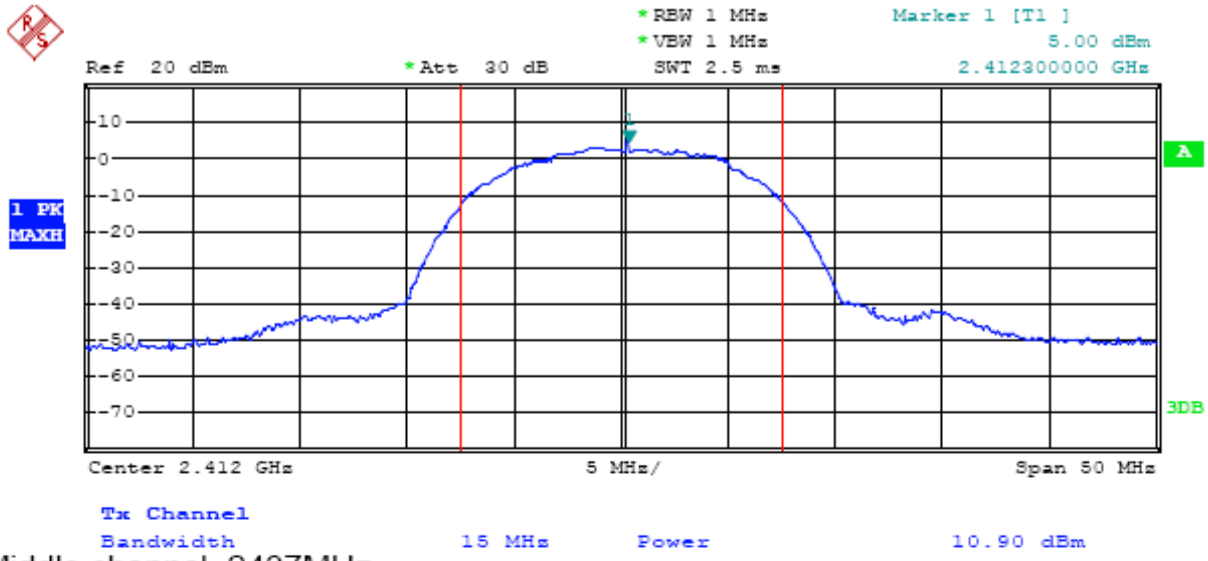
Channel (GHz)	Peak Output Power (dBm)	Cable loss (dB)	Power level(dBm)	Limit (dBm)	Margin (dB)
2.412	10.90	0.50	11.40	30.00	18.60
2.437	11.77	0.50	12.27	30.00	17.73
2.462	11.85	0.50	12.35	30.00	17.65

For EUT communicating with 802.11g Mode

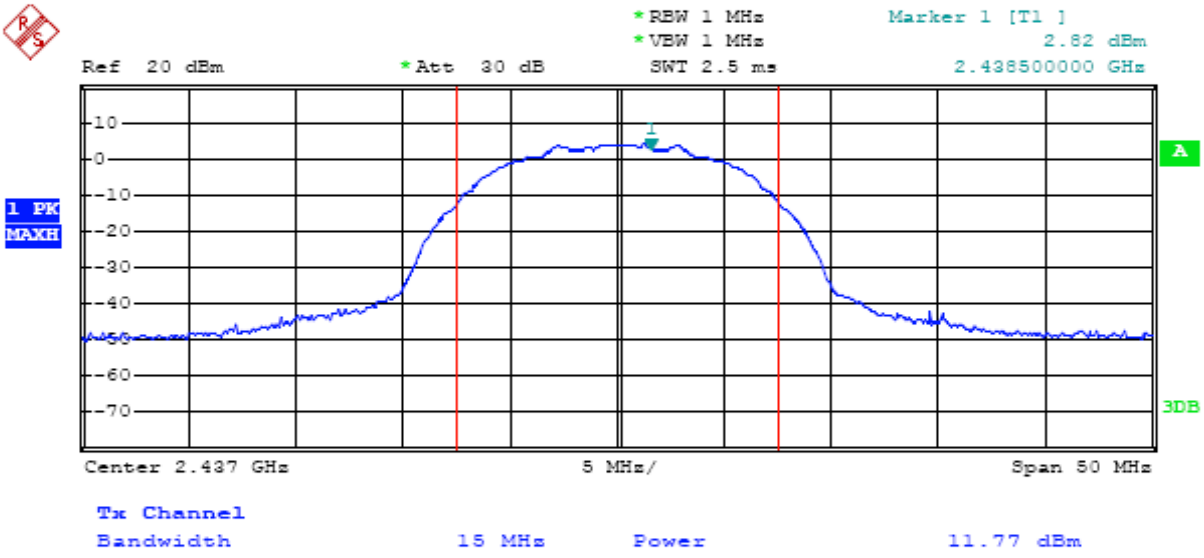
Channel (GHz)	Peak Output Power (dBm)	Cable loss (dB)	Power level(dBm)	Limit (dBm)	Margin (dB)
2.412	9.33	0.50	9.83	30.00	20.17
2.437	10.31	0.50	10.81	30.00	19.19
2.462	9.84	0.50	10.34	30.00	19.66

The EUT communicating with 802.11b Mode

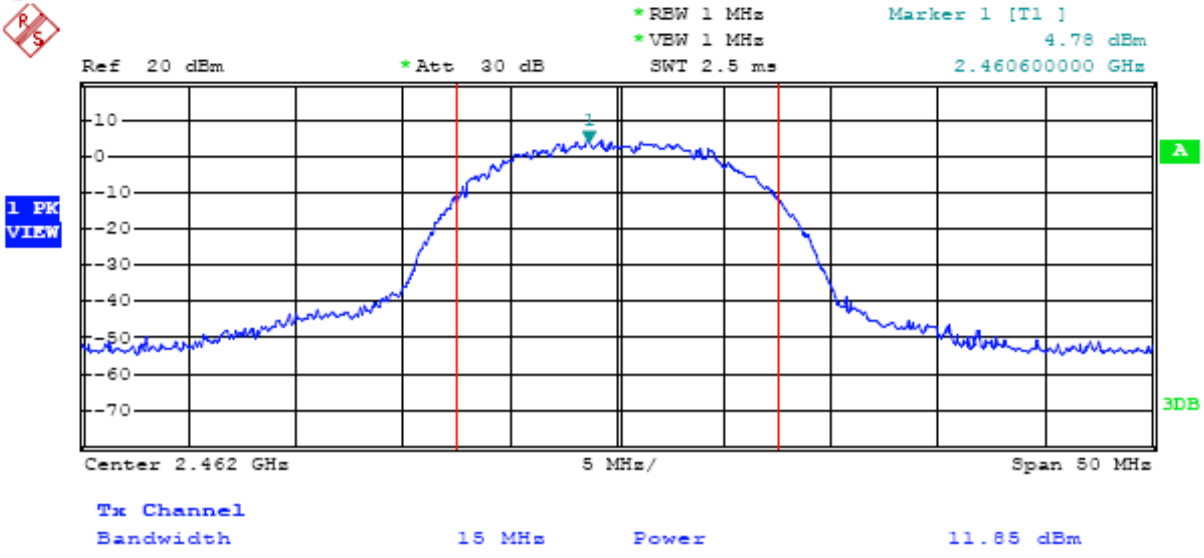
Lowest channel=2412MHz



Middle channel=2437MHz

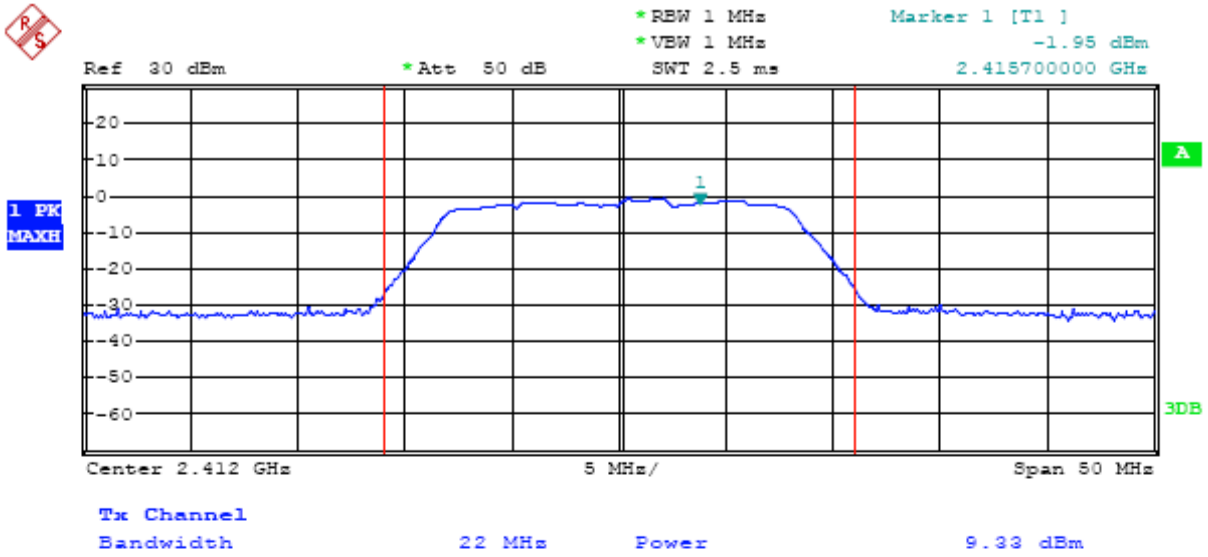


Highest channel=2462MHz

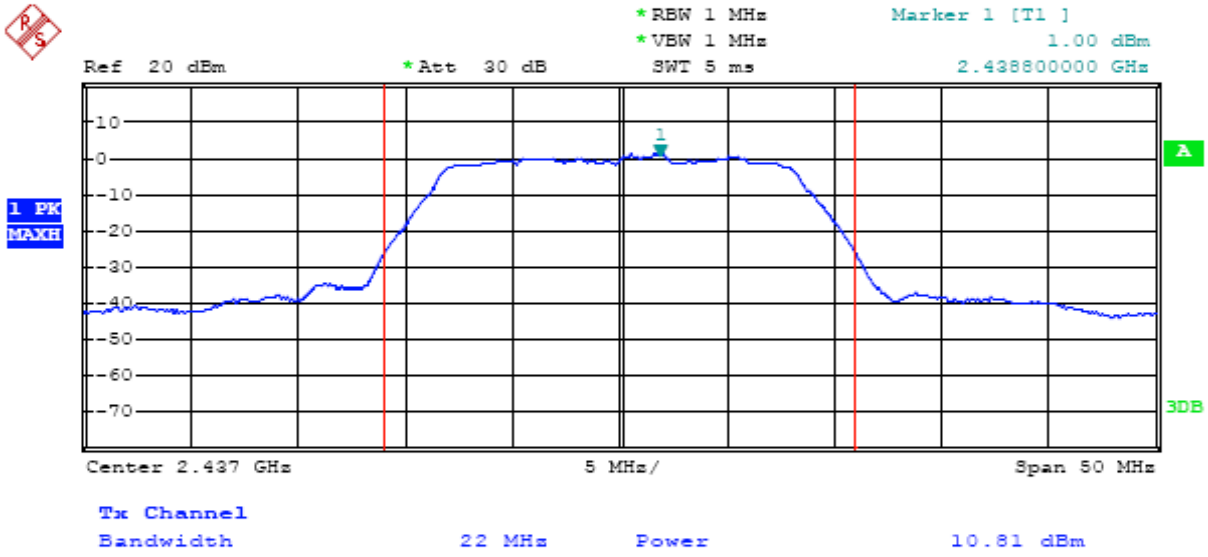


The EUT communicating with 802.11g Mode

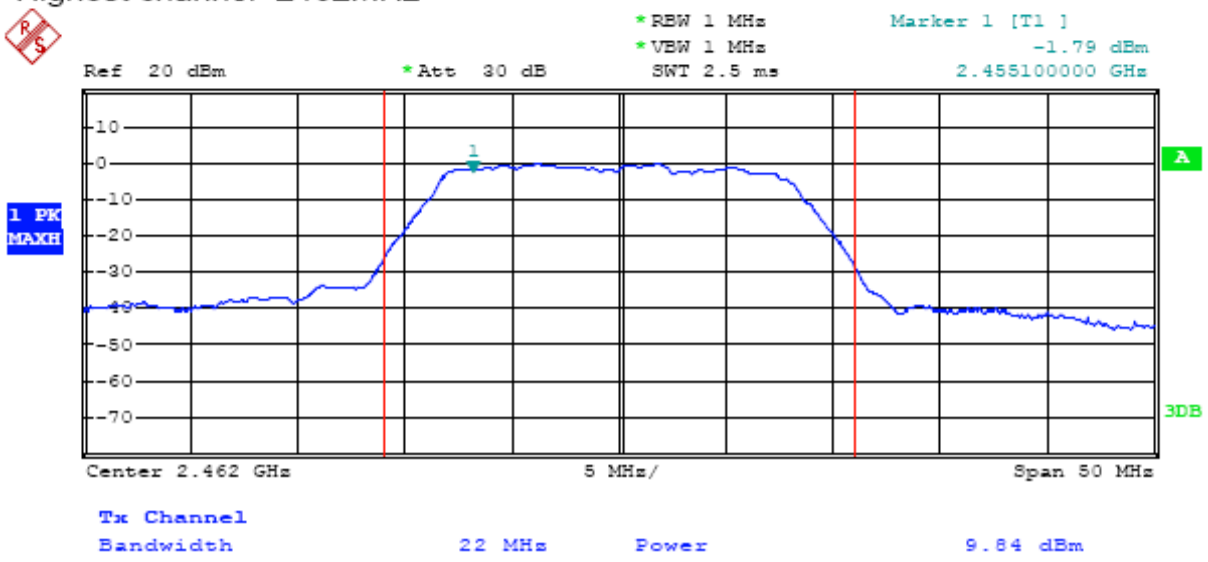
Lowest channel=2412MHz



Middle channel=2437MHz



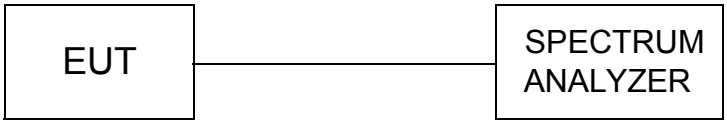
Highest channel=2462MHz



Conclusion: The EUT meets the requirements of this section.

4.5. Band Edge Measurement

TEST CONFIGURATION



TEST PROCEDURE

The band edge compliance of RF radiated emission should be measured by following the guidance in ANSI C63.4 and FCC KDB Publication No. 558074 (Measurement Guidelines of DTS) with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc. Set RBW=100kHz and VBM= 300KHz to measure the peak field strength and set RBW to 1MHz and VBW to 10Hz to measure the average radiated field strength.

The conducted RF band edge was measured by using a spectrum analyzer. Set span wide enough to capture the highest in-band emission and the emission at the band edge. Set RBW and VBW to 100 kHz, to measure the conducted peak band edge.

LIMIT

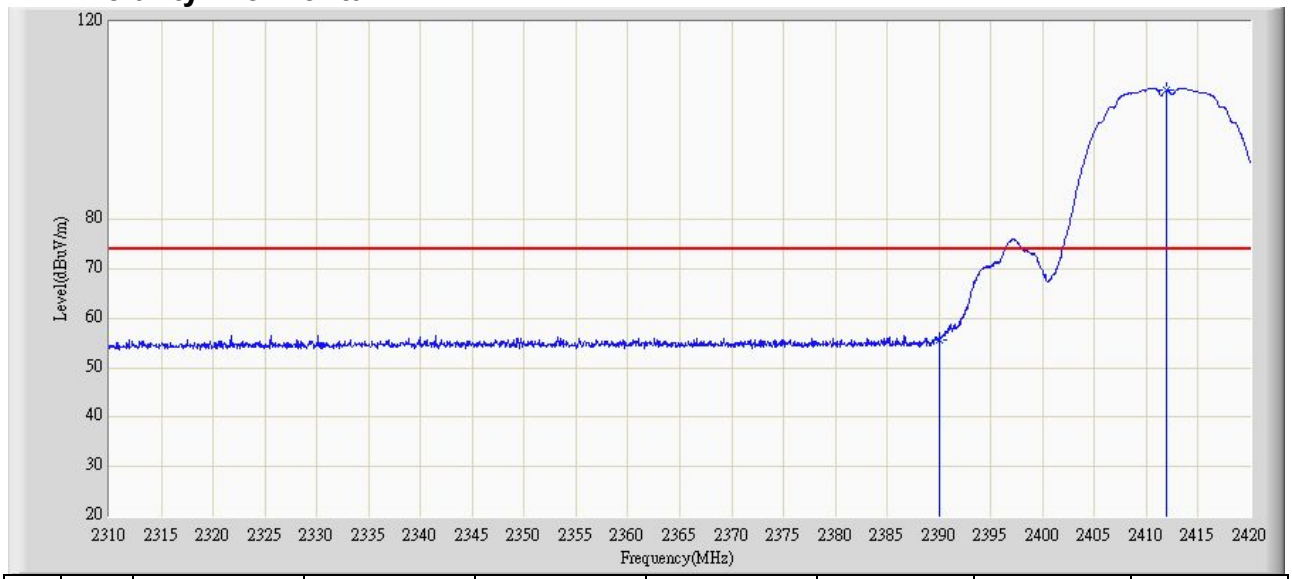
1. Below -20dB of the highest emission level in operating band.

2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209(see Section 15.205(c)).

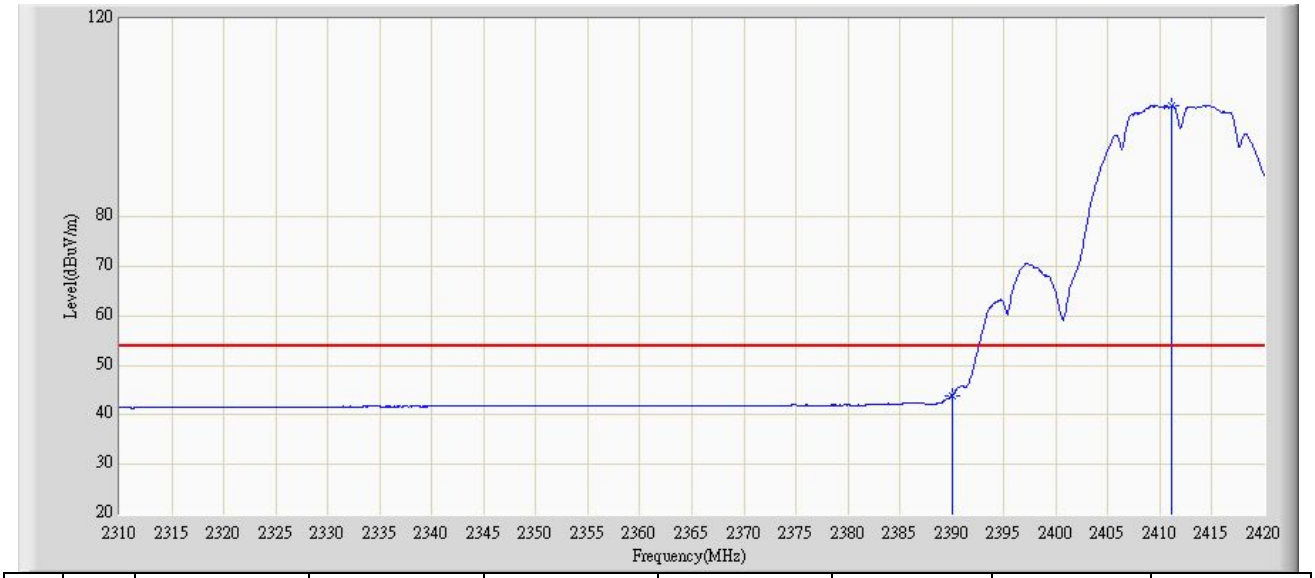
Frequency (MHz)	Limit Average (dBuv/m)	Limit Peak (dBuv/m)
Below 2390 or Above 2483.5	54	74

TEST RESULTS

Transmitting mode: 802.11b
ANT Polarity: Horizontal



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	55.687	25.132	-18.313	74.000	30.555	PK
2	*	2411.915	106.198	75.642	N/A	N/A	30.555	PK

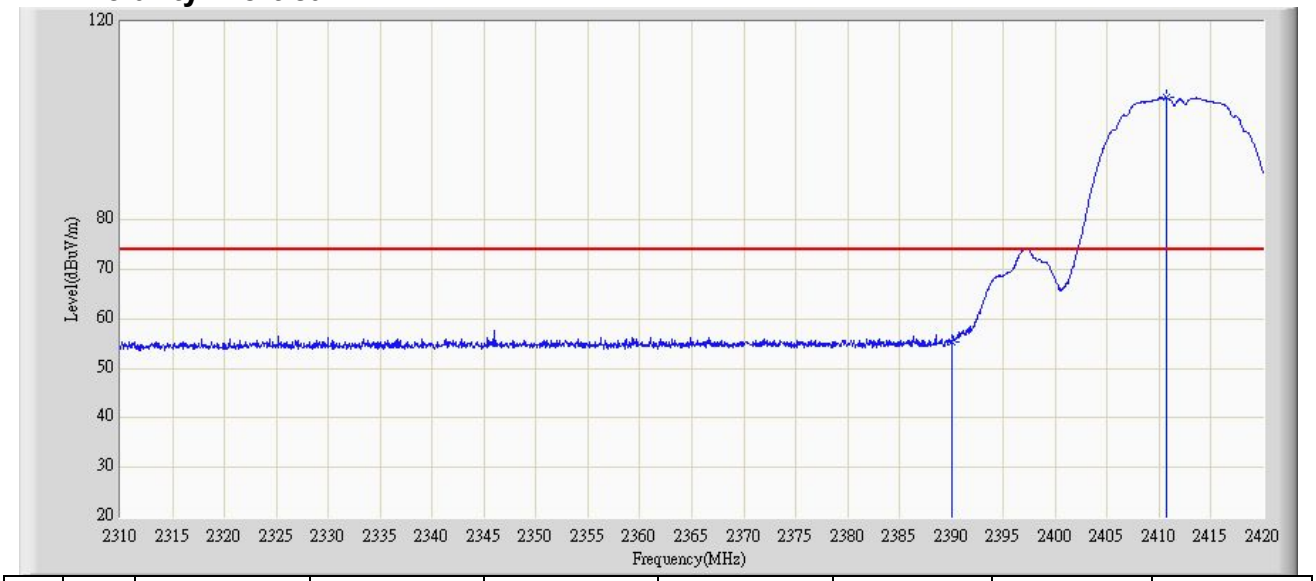


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	43.935	13.380	-10.065	54.000	30.555	AV
2	*	2411.145	102.469	71.913	N/A	N/A	30.556	AV

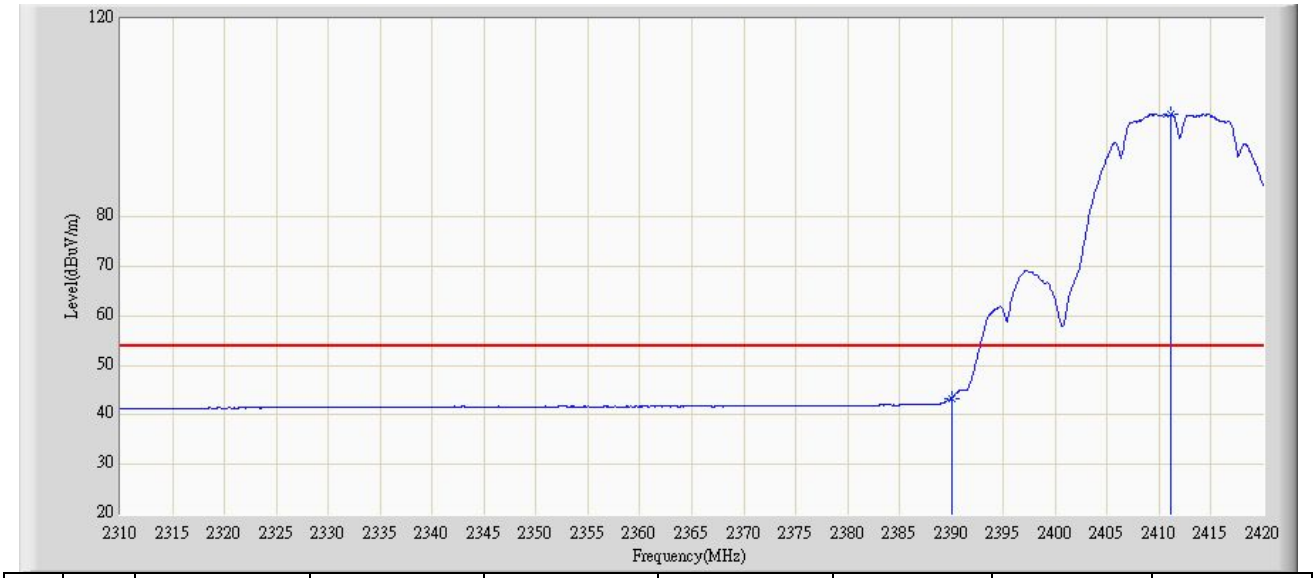
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2462.025	105.579	75.141	N/A	N/A	30.438	PK
2		2483.500	56.458	26.136	-17.542	74.000	30.321	PK

No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2462.800	101.871	71.437	N/A	N/A	30.433	AV
2		2483.500	44.798	14.476	-9.202	54.000	30.321	AV

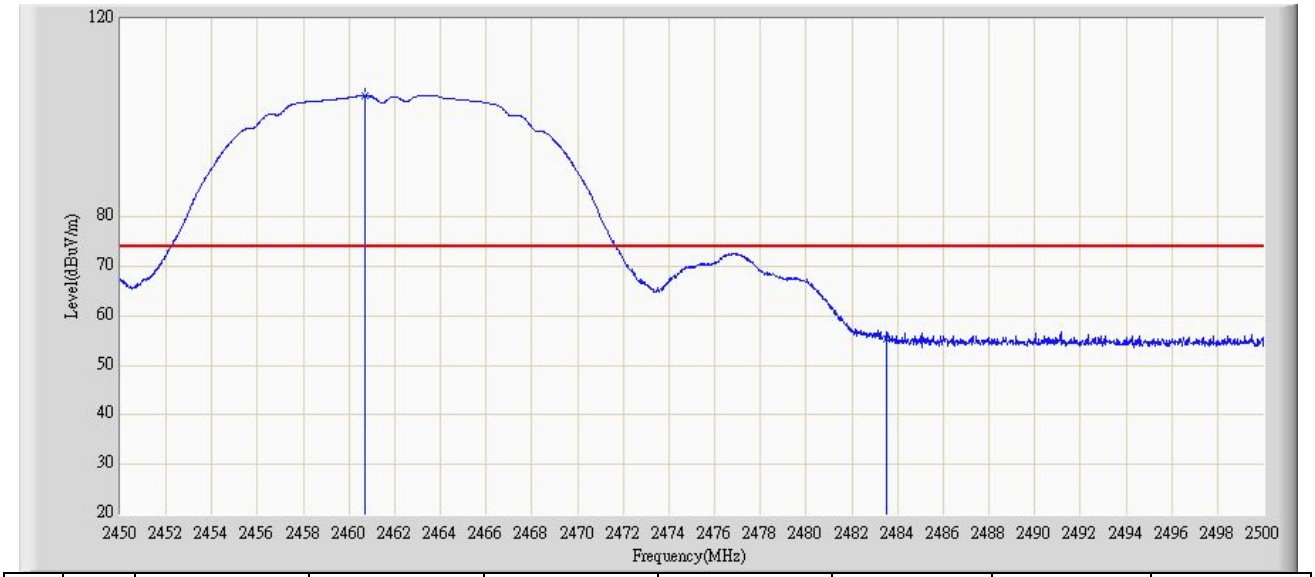
ANT Polarity: Vertical



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	55.394	24.839	-18.606	74.000	30.555	PK
2	*	2410.705	104.638	74.082	N/A	N/A	30.556	PK



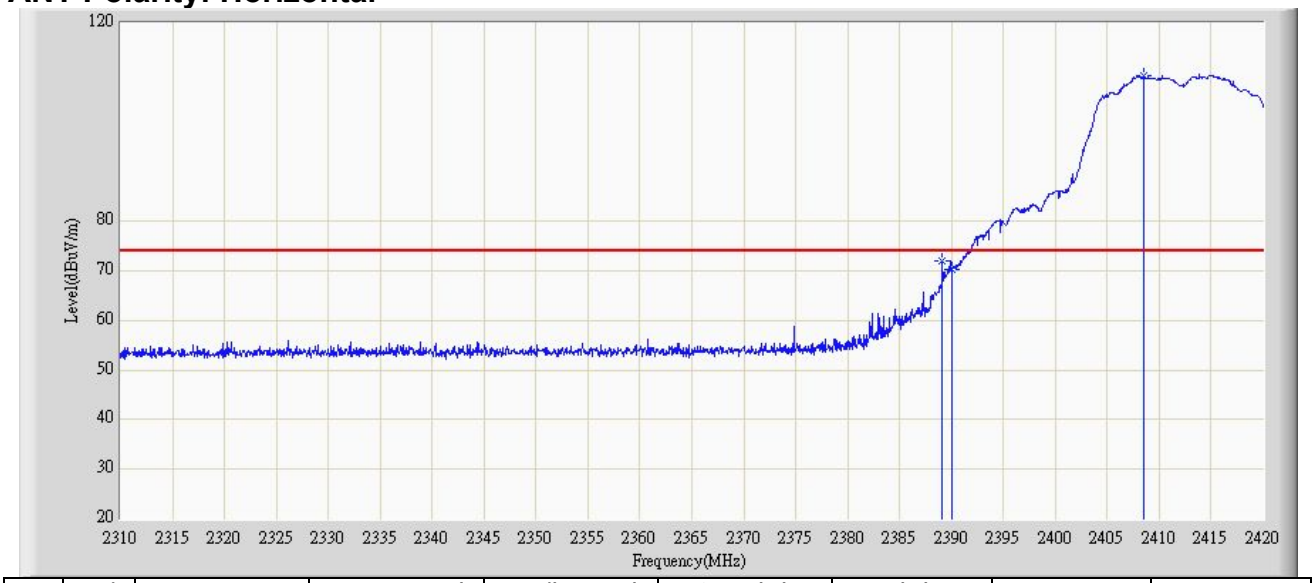
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	43.335	12.780	-10.665	54.000	30.555	AV
2	*	2411.145	100.661	70.105	N/A	N/A	30.556	AV



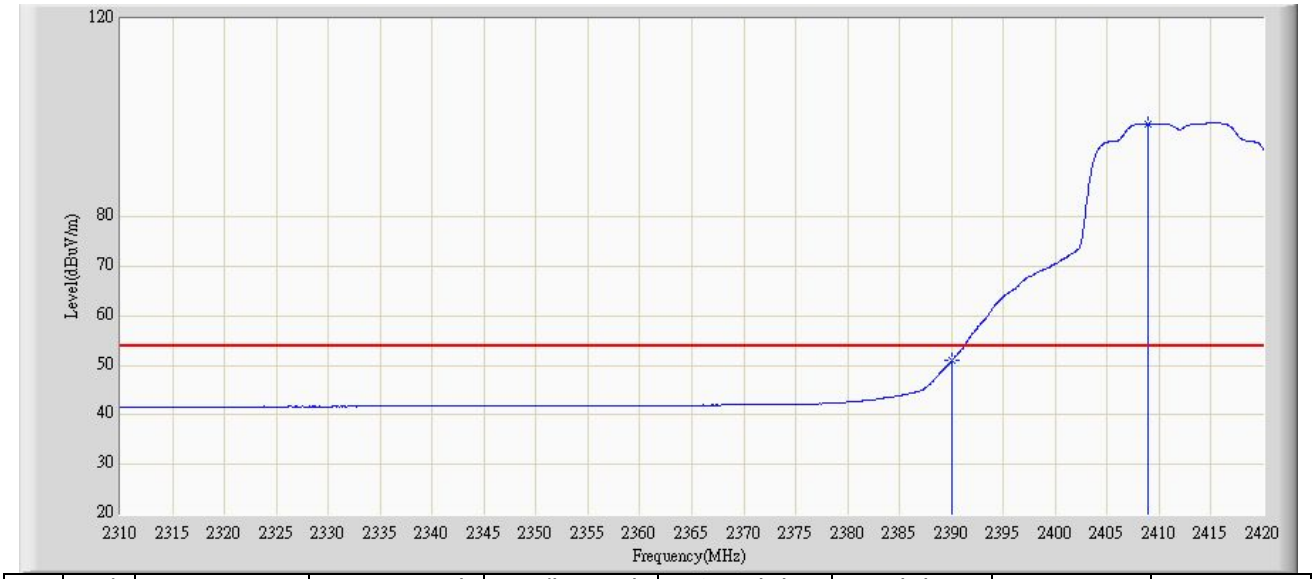
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.700	104.406	73.960	N/A	N/A	30.446	PK
2		2483.500	55.315	24.993	-18.685	74.000	30.321	PK

No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.250	100.912	70.470	N/A	N/A	30.442	AV
2		2483.500	43.770	13.448	-10.230	54.000	30.321	AV

Transmitting mode: 802.11g
ANT Polarity: Horizontal

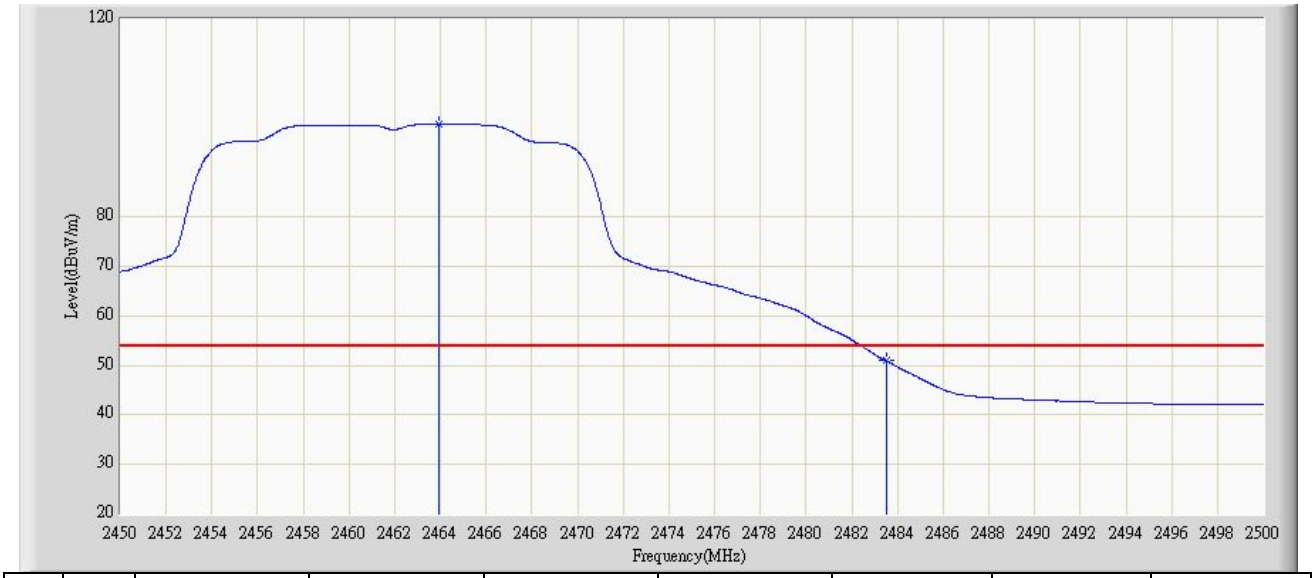


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2389.145	71.933	41.380	-2.067	74.000	30.553	PK
2		2390.000	70.169	39.614	-3.831	74.000	30.555	PK
3	*	2408.560	109.292	78.735	N/A	N/A	30.557	PK



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.895	20.340	-3.105	54.000	30.555	AV
2	*	2408.945	98.742	68.185	N/A	N/A	30.556	AV

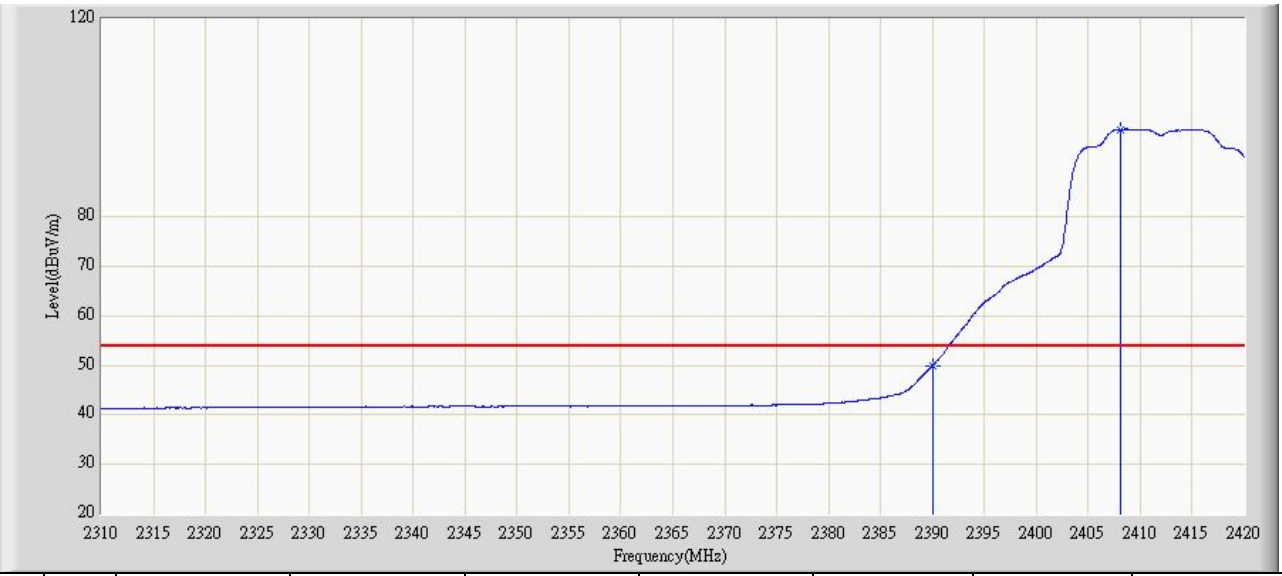
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2463.450	109.036	78.606	N/A	N/A	30.429	PK
2		2483.500	69.722	39.400	-4.278	74.000	30.321	PK
3		2486.550	69.565	39.255	-4.435	74.000	30.310	PK



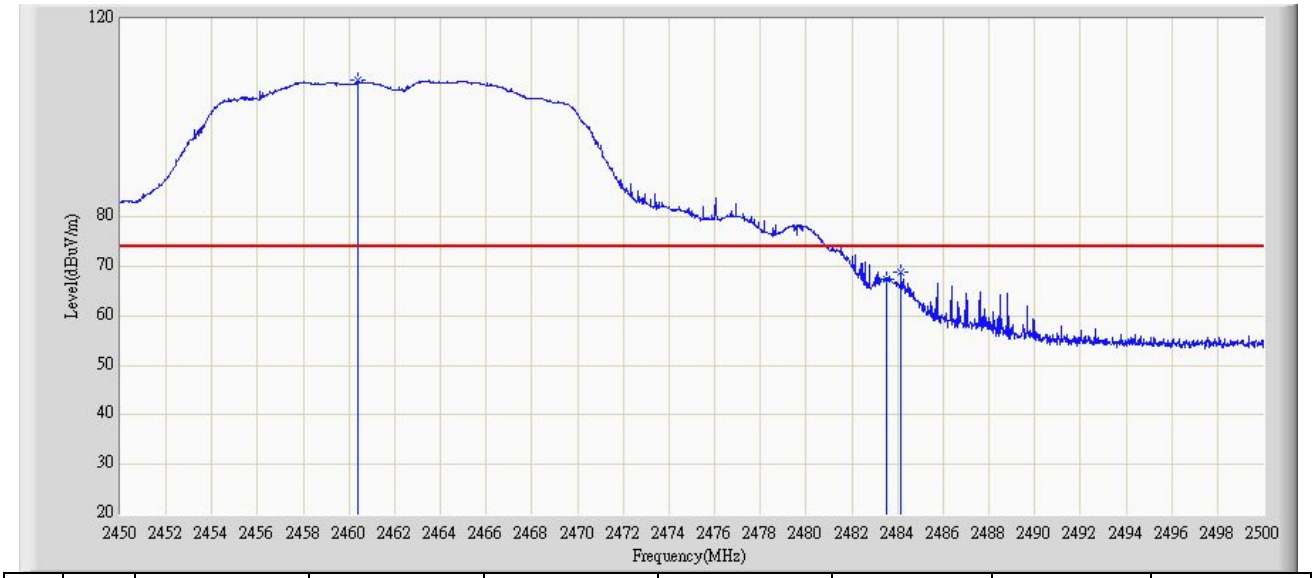
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2463.900	98.729	68.302	N/A	N/A	30.427	AV
2		2483.500	50.939	20.617	-3.061	54.000	30.321	AV

ANT Polarity: Vertical

No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2389.365	70.254	39.700	-3.746	74.000	30.554	PK
2		2390.000	69.053	38.498	-4.947	74.000	30.555	PK
3	*	2408.120	107.938	77.381	N/A	N/A	30.557	PK



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	49.975	19.420	-4.025	54.000	30.555	AV
2	*	2408.065	97.653	67.096	N/A	N/A	30.557	AV

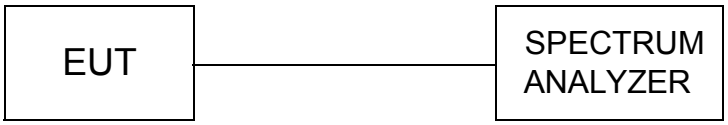


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.400	107.741	77.294	N/A	N/A	30.447	PK
2		2483.500	67.518	37.196	-6.482	74.000	30.321	PK
3		2484.150	68.750	38.431	-5.250	74.000	30.319	PK

No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.375	96.867	66.420	N/A	N/A	30.448	AV
2		2483.500	49.046	18.724	-4.954	54.000	30.321	AV

4.6. Power Spectral Density Measurement

TEST CONFIGURATION



TEST PROCEDURE

1. The testing follows the FCC KDB Publication No. 558074 (Measurement Guidelines of DTS).
2. The transmitter output (antenna port) was connected to the spectrum analyser.
3. Set RBW of spectrum analyzer to 3kHz and VBW to 10kHz. Set Detector to Peak, Trace to Max Hold.
4. Mark the frequency with maximum peak power as the center of the display of the spectrum.
5. Set the span to 1.5MHz and the sweep time to 100s and record the maximum peak value.

LIMIT

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

TEST RESULTS

1. For EUT communicating with 802.11b Mode

Channel Frequency (MHz)	Power Spectral Density (dBm)	Cable loss (dB)	Power Spectral Density level (dBm)	Maximum Limit (dBm)	Margin (dB)
2412	-18.22	0.50	-17.72	8.00	25.72
2437	-14.95	0.50	-14.45	8.00	22.45
2462	-15.49	0.50	-14.99	8.00	22.99

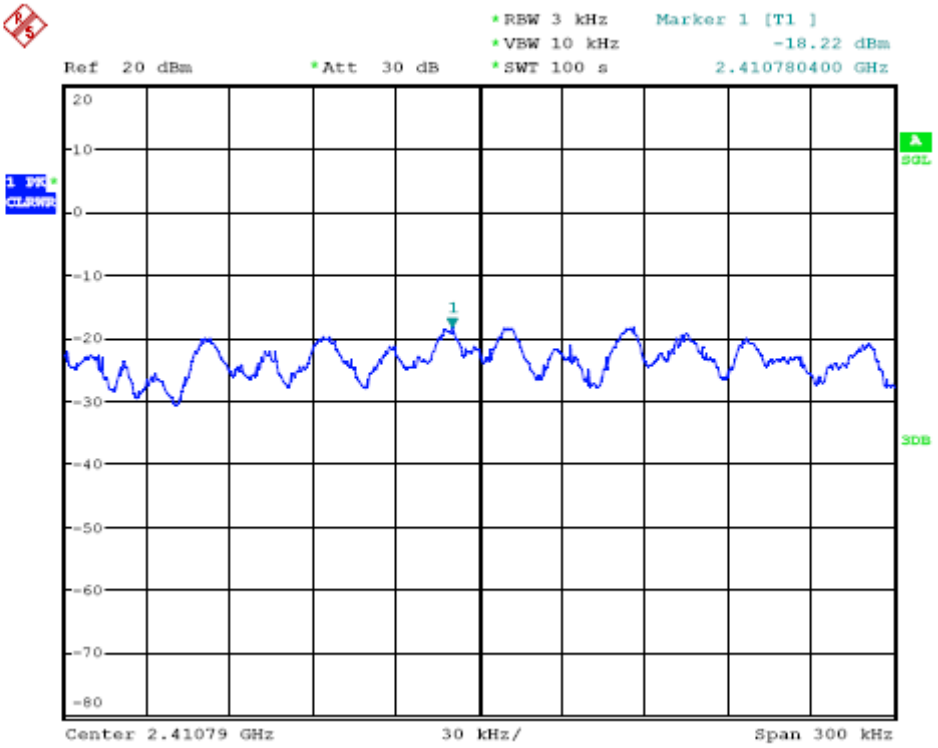
2. For EUT communicating with 802.11g Mode

Channel Frequency (MHz)	Power Spectral Density (dBm)	Cable loss (dB)	Power Spectral Density level (dBm)	Maximum Limit (dBm)	Margin (dB)
2412	-21.23	0.50	-20.73	8.00	-28.73
2437	-19.73	0.50	-19.23	8.00	-27.23
2462	-18.23	0.50	-17.73	8.00	-25.73

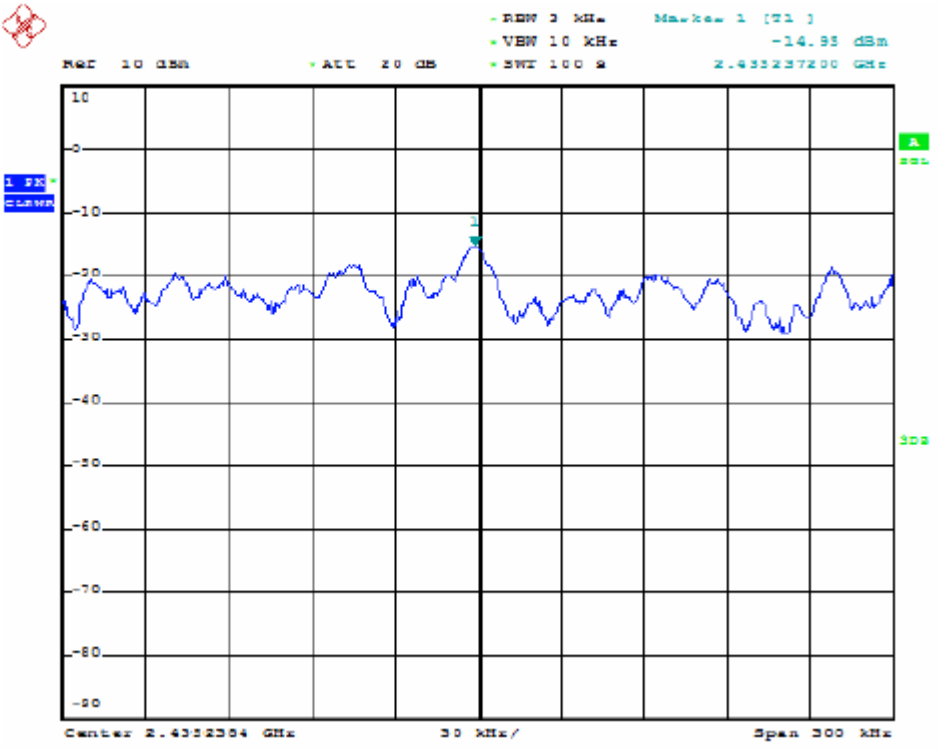
Conclusion:
The EUT meets the requirements of this section.
Please refer to the graph and data as below:

802.11b mode:

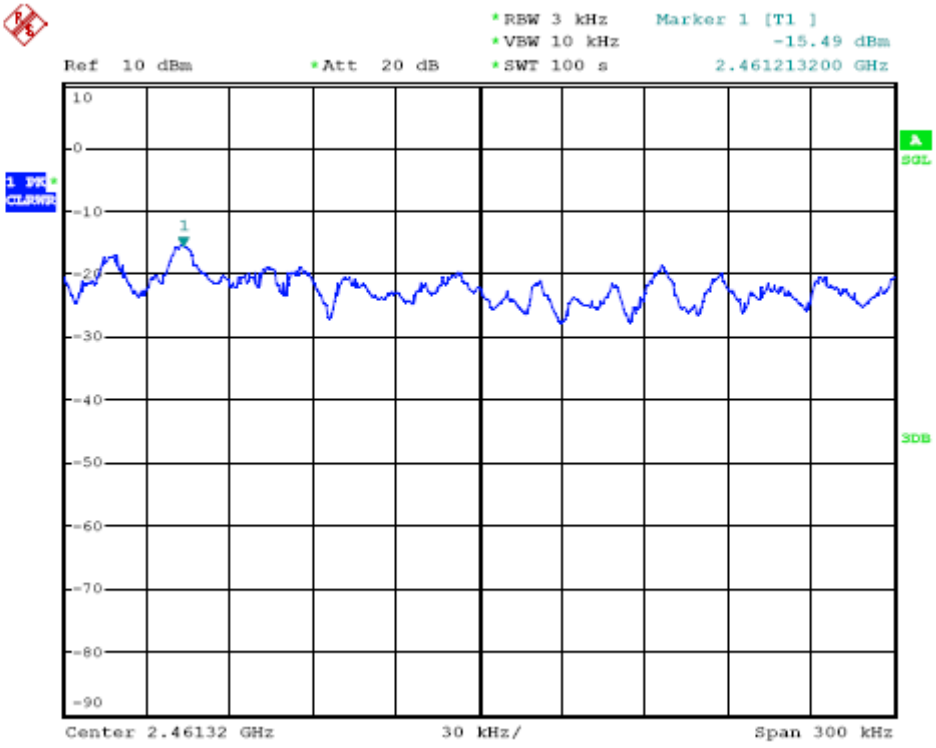
Lowest channel=2412MHz



Middle channel=2437MHz

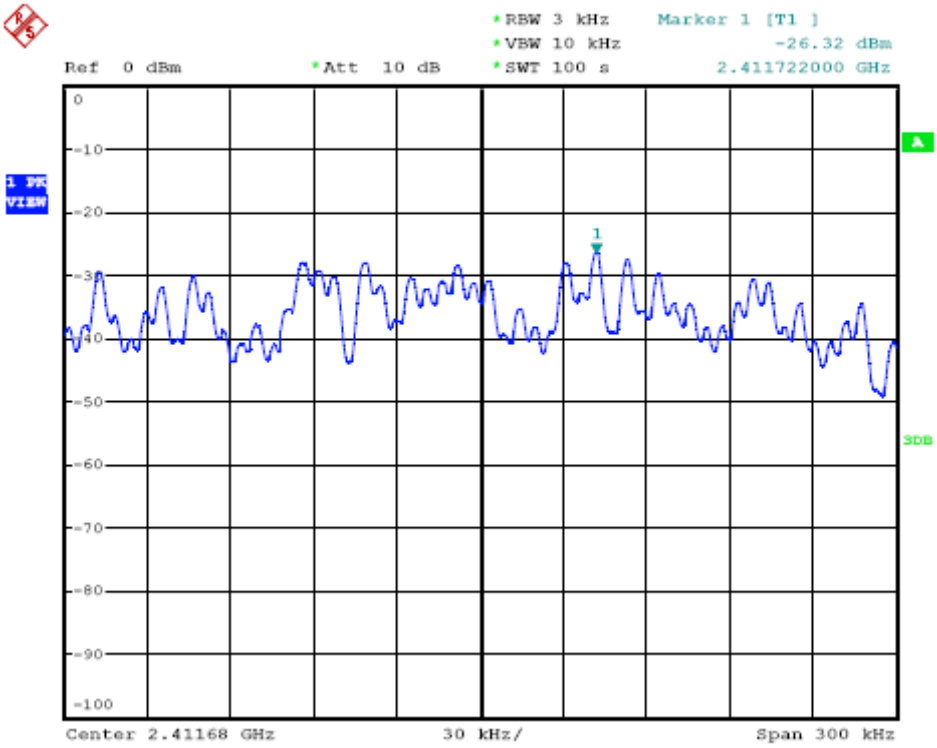


Highest channel=2462MHz

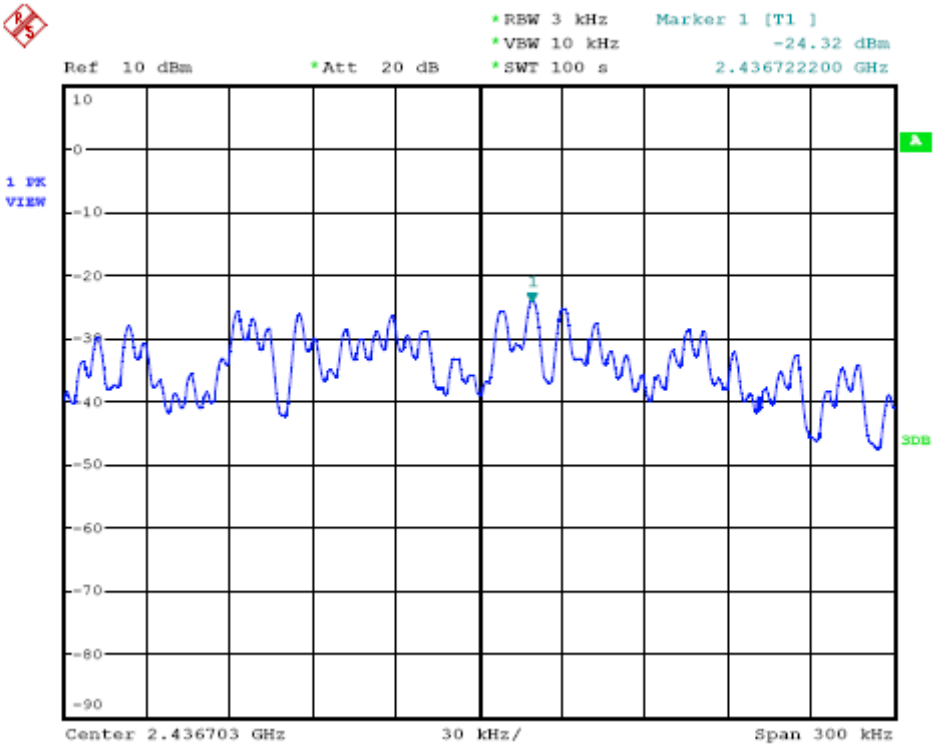


802.11g mode:

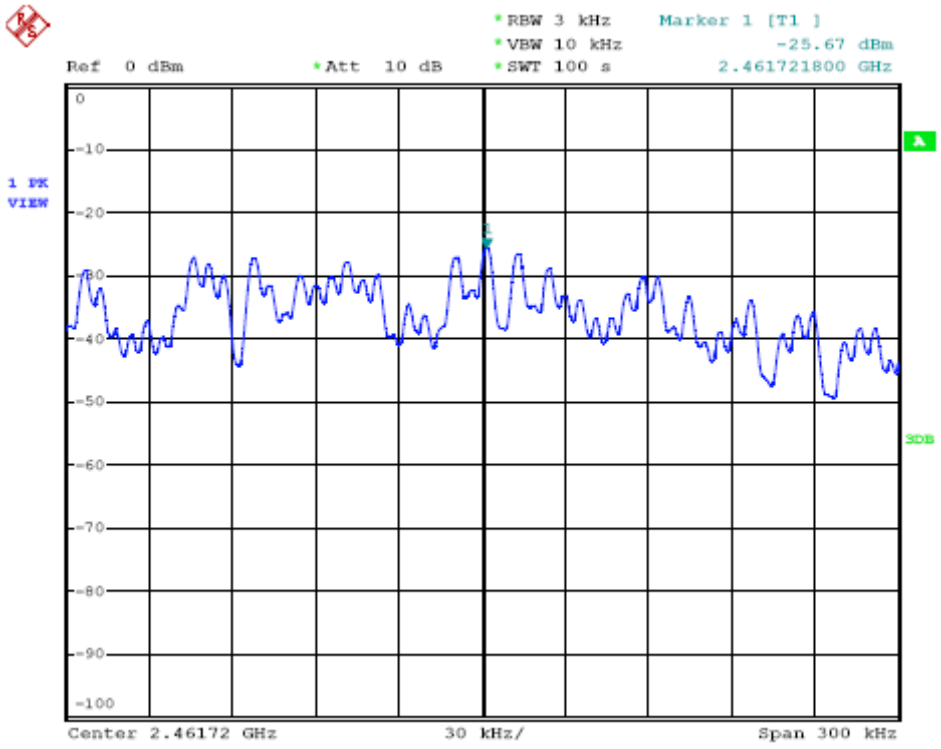
Lowest channel=2412MHz



Middle channel=2437MHz



Highest channel=2462MHz



4.7. Antenna Requirement

STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (c), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

Refer to statement below for compliance.

The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

ANTENNA CONNECTED CONSTRUCTION

The directional gains of antenna used for transmitting is -1.0 dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Please see EUT photo for details.

4.8. RF Exposure

STANDARD APPLICABLE

According to §1.1307 (b)(1), system operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

This is a Portable device.

MEASUREMENT RESULTS

This is a portable device and the Max peak output power is 12.35dBm (17.18 mW) lower than low threshold 60/fGHz mW (24.48 mW), d＜2.5cm in general population category.

The SAR measurement is not necessary.

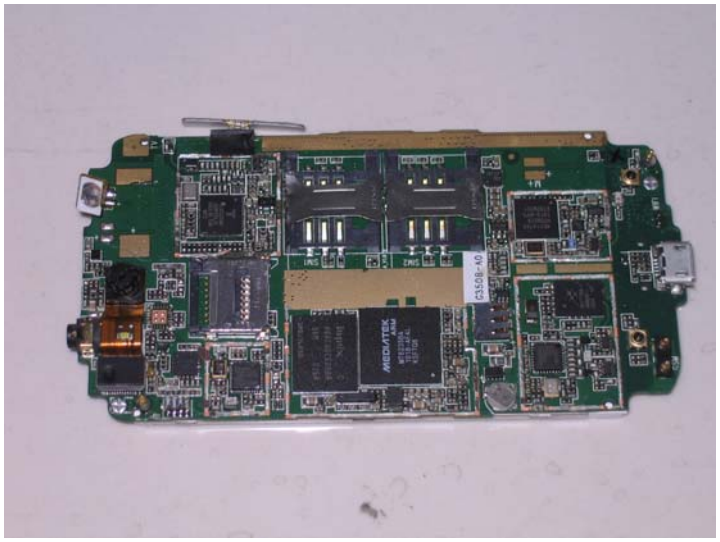
5. Test Setup Photos of the EUT

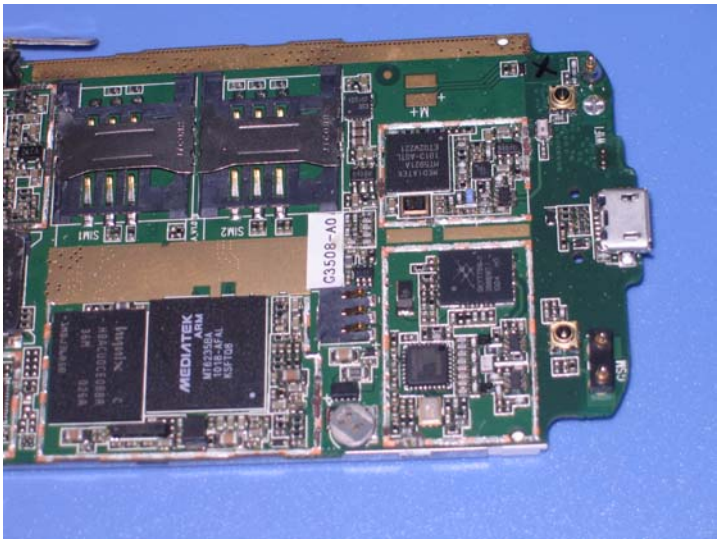
6. External and Internal Photos of the EUT

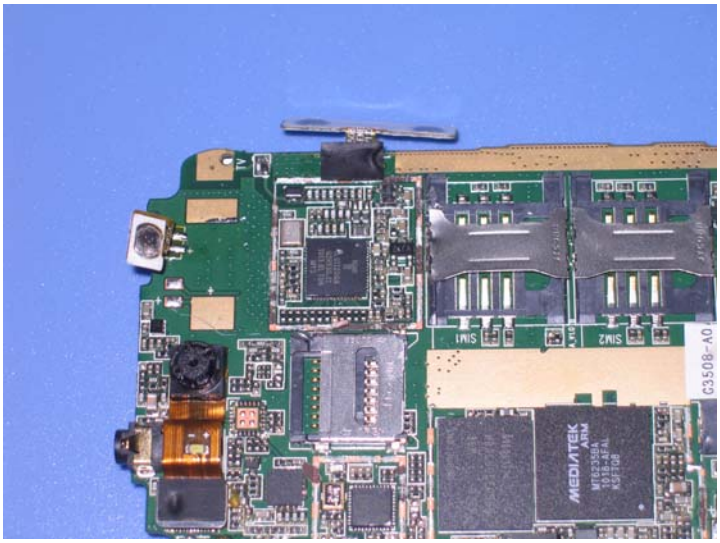
External Photos

Internal Photos


TV
Wi Fi


MEDIATEK





.....End of Report.....