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FCC PART 15 SUBPART C TEST REPORT

FCC Part 15.247

Report Reference No.: **CTL1210111194-WW**

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Date of issue: Oct. 22, 2012

Representative Laboratory Name: **Shenzhen CTL Electromagnetic Technology Co., Ltd.**

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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: **New Telecom Holdings Limited**

Address: 2/F, Eton Tower, 8 Hysan Avenue, Causeway, Hong Kong.

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 CTL Electromagnetic Technology Co., Ltd.

Master TRF: Dated 2011-01

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Test item description: **Tablet**

FCC ID: **PE4VOLGO97TABN**

Trade Mark: **3Q**

Model/Type reference: **QS9718C**

Modulation: **DSSS, OFDM**

Work Frequency Range: **2412~2462MHz**

Antenna Type: **Internal**

Result: **Positive**

TEST REPORT

Test Report No. : CTL1210111194-WW	Oct. 22, 2012 Date of issue
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Equipment under Test : Tablet

Model /Type : QS9718C

Listed Models : /

Applicant : New Telecom Holdings Limited

Address : 2/F, Eton Tower, 8 Hysan Avenue, Causeway, Hong Kong.

Manufacturer : New Telecom Holdings Limited

Address : 2/F, Eton Tower, 8 Hysan Avenue, Causeway, Hong Kong.

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.

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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 C63.10-2009: American National Standard for Testing Unlicensed Wireless Devices.

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	:	Sept. 18, 2012
Testing commenced on	:	Sept. 19, 2012
Testing concluded on	:	Sept. 29, 2012

2.2. Equipment Under Test

Power supply system utilised

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

Description of the test mode

IEEE 802.11b/g/n: Thirteen channels are provided to the EUT, but only eleventh channels used for USA.

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

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

2.4GHz (Tablet support 802.11bgn)

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 (2412MHz), mid (2442MHz) and high (2462MHz) 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:

- ☐ - supplied by the manufacturer
- ☐ - supplied by the lab

Manufacturer :

Model No. :

2.6. NOTE

1. The EUT is an 802.11b/g/n Tablet, The functions of the EUT listed as below:

	Test Standards	Reference Report
WLAN 802.11b/g, 802.11n	FCC Part 15 Subpart C (Section 15.247)	CTL1210111194-WW
WLAN 802.11b/g, 802.11n	FCC Per 47 CFR 2.1091(b)	129S036R-HP-US-P03V01

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	√	—	—	—
802.11n(20MHz)	√	—	—	—
802.11n(40MHz)	√	—	—	—

3. The EUT incorporates a SISO function, Physically, the EUT provides two completed transmitter and two completed receivers.

Modulation Mode	TX Function
802.11b	1TX
802.11g	1TX
802.11n (20MHz)	1TX
802.11n (40MHz)	1TX

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

This submittal(s) (test report) is intended for FCC ID: **PE4VOLGO97TABN** 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, 2011.

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:

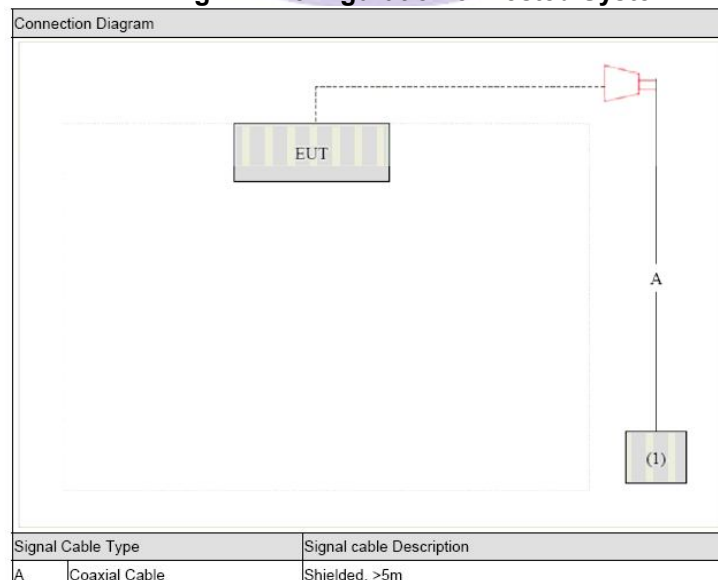
Temperature: 15-35 °C

Humidity: 30-60 %

Atmospheric pressure: 950-1050mbar

3.4. Configuration of Tested System

Fig. 2-1 Configuration of Tested System



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	2012/04/14	2013/04/13
2	Radio Communication Tester	ROHDE & SCHWARZ	CMU200	2012/04/14	2013/04/13
3	Dual Directional Coupler	Agilent	778D	2012/04/14	2013/04/13
4	10dB attenuator	SCHWARZBECK	MTAIMP-136	2012/04/14	2013/04/13
5	Tunable Bandreject filter	K&L	3TNF-800	2012/04/14	2013/04/13
6	Tunable Bandreject filter	K&L	5TNF-1700	2012/04/14	2013/04/13
7	High-Pass Filter	K&L	9SH10-2700/X12750-O/O	2012/04/14	2013/04/13
8	High-Pass Filter	K&L	41H10-1375/U12750-O/O	2012/04/14	2013/04/13
9	Coaxial Cable	Huber+Suhner	AC4-RF-H	2012/04/14	2013/04/13
10	AC Power Supply	IDRC	CF-500TP	2012/04/14	2013/04/13
11	DC Power Supply	IDRC	CD-035-020PR	2012/04/14	2013/04/13
12	RF Current Probe	FCC	F-33-4	2012/04/14	2013/04/13
13	Temperature /Humidity Meter	zhicheng	ZC1-2	2012/04/14	2013/04/13
14	MICROWAVE AMPLIFIER	HP	8349B	2012/04/14	2013/04/13
15	Amplifier	HP	8447D	2012/04/14	2013/04/13
16	SIGNAL GENERATOR	HP	8647A	2012/04/14	2013/04/13
17	Log Periodic Antenna	ELECTRO-METRICS	EM-6950	2012/04/14	2013/04/13
18	Horn Antenna	Schwarzbeck	BBHA9120A	2012/04/14	2013/04/13
19	EMI Test Receiver	R&S	ESPI	2012/04/14	2013/04/13
20	Loop Antenna	ZHINAN	ZN30900A	2012/04/14	2013/04/13
21	Horn Antenna	Schwarzbeck	BBHA9120D	2012/04/14	2013/04/13
22	Horn Antenna	Schwarzbeck	BBHA9170	2012/04/14	2013/04/13
23	Spectrum Analyzer	Agilent	E4446A	2012/04/14	2013/04/13
24	Wideband Peak Power Meter	Anritsu	ML2495A	2012/04/14	2013/04/13
25	Power Sensor	Anritsu	MA2411B	2012/04/14	2013/04/13

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 Emission	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 Emission	PASS
FCC Part 15.203/15.247 (b)	Antenna Requirement	PASS
FCC Per 47 CFR 2.1091(b)	MPE Evaluation	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.

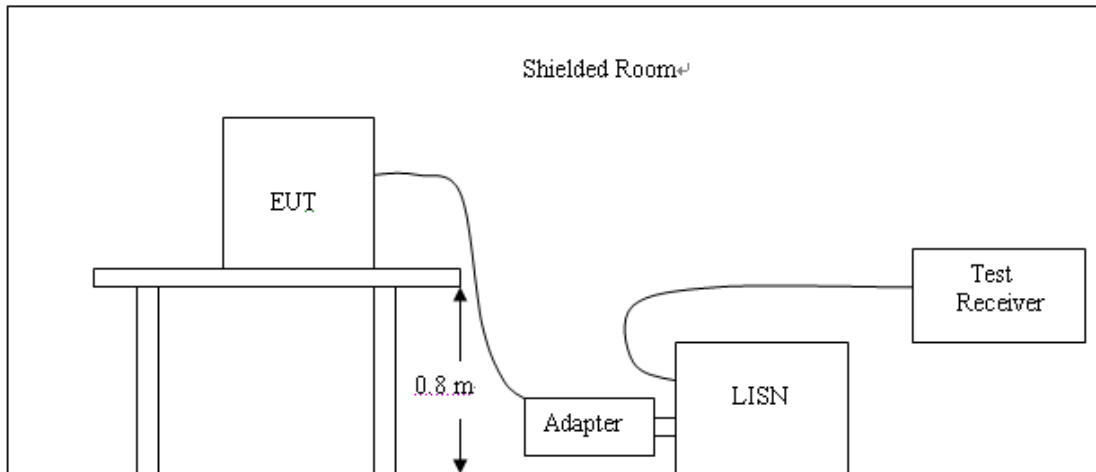
Test Items	Mode	Data Rate	Channel
AC Power Conducted Emission	Normal Link	11 Mbps	1
Maximum Peak Conducted Output Power Power Spectral Density 6dB Bandwidth Spurious RF conducted emission	11b/DSSS	11 Mbps	1/6/11
	11g/OFDM	54 Mbps	1/6/11
	11n(20MHz)/OFDM	65Mbps	1/6/11
	11n(40MHz)/OFDM	150Mbps	3/6/9
Radiated Emission 30MHz~1GHz	11b/DSSS	11 Mbps	1/6/11
	11g/OFDM	54 Mbps	1/6/11
	11n(20MHz)/OFDM	65Mbps	1/6/11
	11n(40MHz)/OFDM	150Mbps	3/6/9
Radiated Emission 1GHz~10th Harmonic	11b/DSSS	11 Mbps	1/6/11
	11g/OFDM	54 Mbps	1/6/11
	11n(20MHz)/OFDM	65Mbps	1/6/11
	11n(40MHz)/OFDM	150Mbps	3/6/9
Band Edge Compliance of RF Emission	11b/DSSS	11 Mbps	1/11
	11g/OFDM	54 Mbps	1/11
	11n(20MHz)/OFDM	65Mbps	1/11
	11n(40MHz)/OFDM	150Mbps	3/9

Note1: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.

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 (dB μ v)			
	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

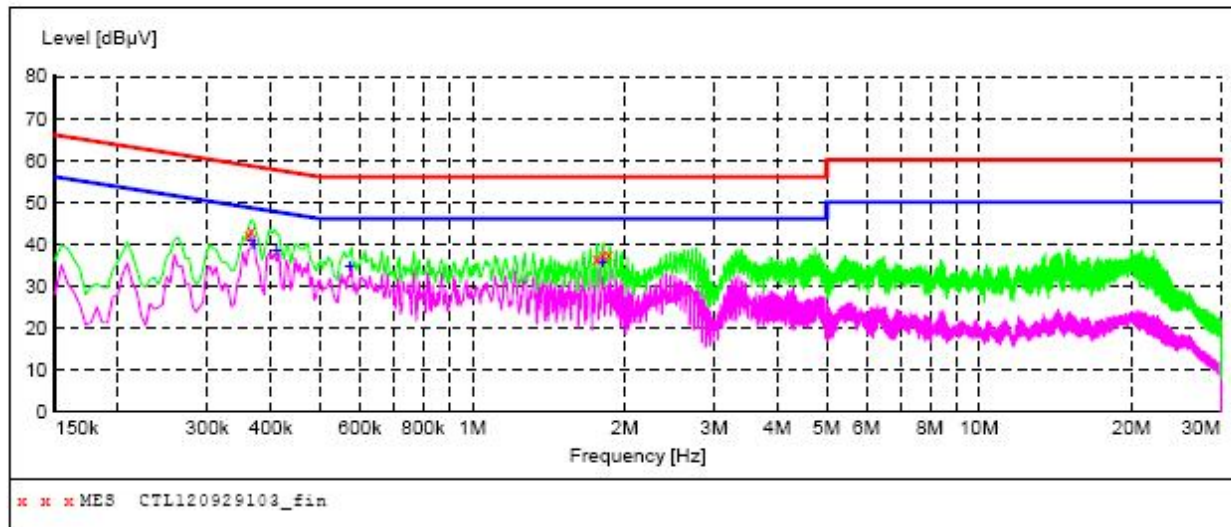
For intentional device, according to §15.207(a) Line Conducted Emission Limit is same as above table.

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**SCAN TABLE: "Voltage (9K-30M)FIN"**

Short Description: 150K-30M Voltage

**MEASUREMENT RESULT: "CTL120929103_fin"**

9/29/2012 11:15AM

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.361500	42.00	10.2	59	16.7	QP	N	GND
0.366000	43.20	10.2	59	15.4	QP	N	GND
1.756500	36.30	10.3	56	19.7	QP	N	GND
1.806000	37.40	10.3	56	18.6	QP	N	GND
1.855500	37.50	10.3	56	18.5	QP	N	GND

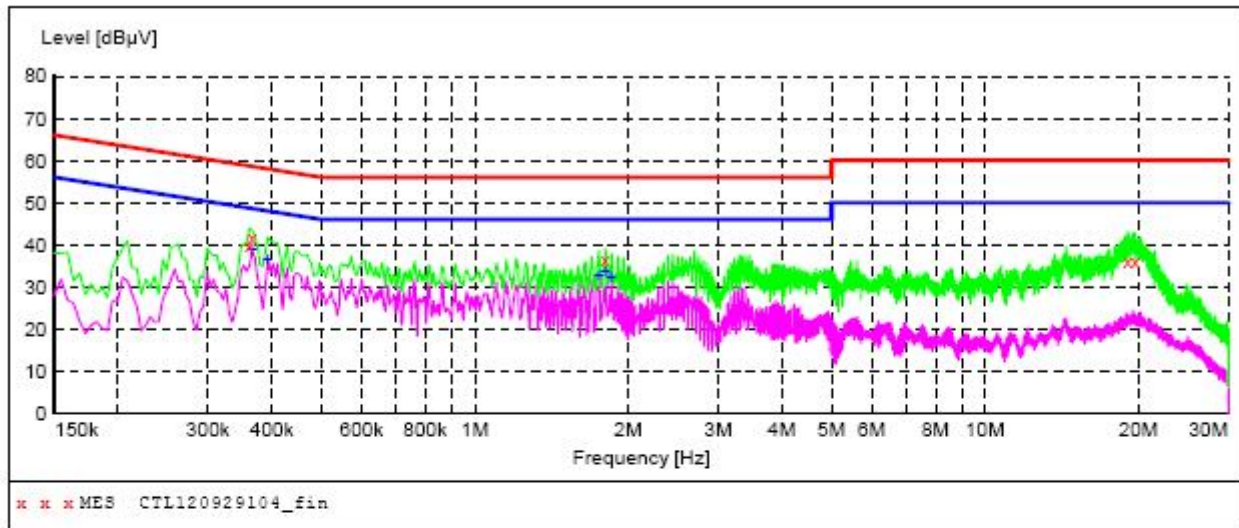
MEASUREMENT RESULT: "CTL120929103_fin2"

9/29/2012 11:15AM

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.366000	40.80	10.2	49	7.8	AV	N	GND
0.370500	39.70	10.2	49	8.8	AV	N	GND
0.411000	38.60	10.2	48	9.0	AV	N	GND
0.573000	34.60	10.2	46	11.4	AV	N	GND
1.806000	35.60	10.3	46	10.4	AV	N	GND

SCAN TABLE: "Voltage (9K-30M)FIN"

Short Description: 150K-30M Voltage

**MEASUREMENT RESULT: "CTL120929104_fin"**

9/29/2012 11:18AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.361500	39.90	10.2	59	18.8	QP	L1	GND
0.366000	41.90	10.2	59	16.7	QP	L1	GND
1.801500	36.30	10.3	56	19.7	QP	L1	GND
19.014000	36.10	10.9	60	23.9	QP	L1	GND
19.666500	36.20	10.9	60	23.8	QP	L1	GND

MEASUREMENT RESULT: "CTL120929104_fin2"

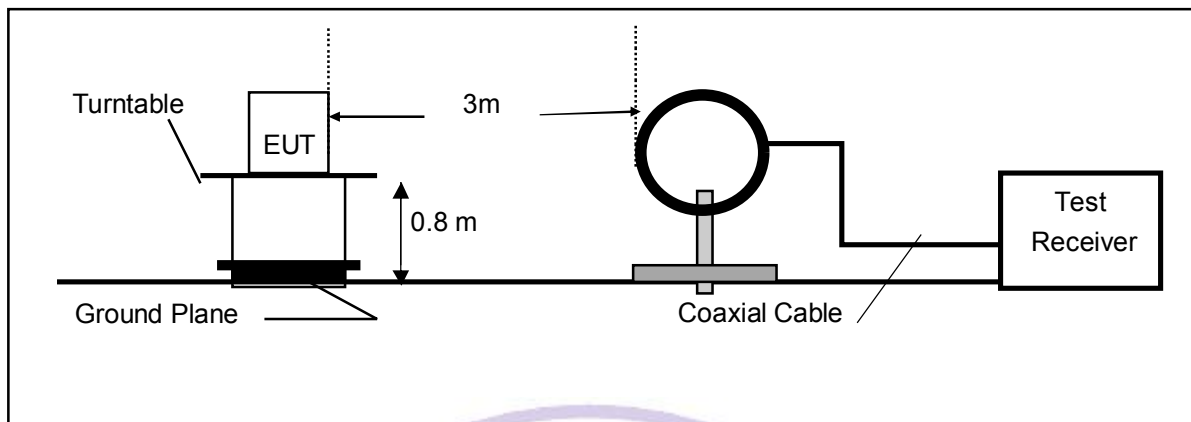
9/29/2012 11:18AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.366000	38.80	10.2	49	9.8	AV	L1	GND
0.393000	36.60	10.2	48	11.4	AV	L1	GND
1.752000	32.70	10.3	46	13.3	AV	L1	GND
1.801500	33.70	10.3	46	12.3	AV	L1	GND
1.851000	32.30	10.3	46	13.7	AV	L1	GND

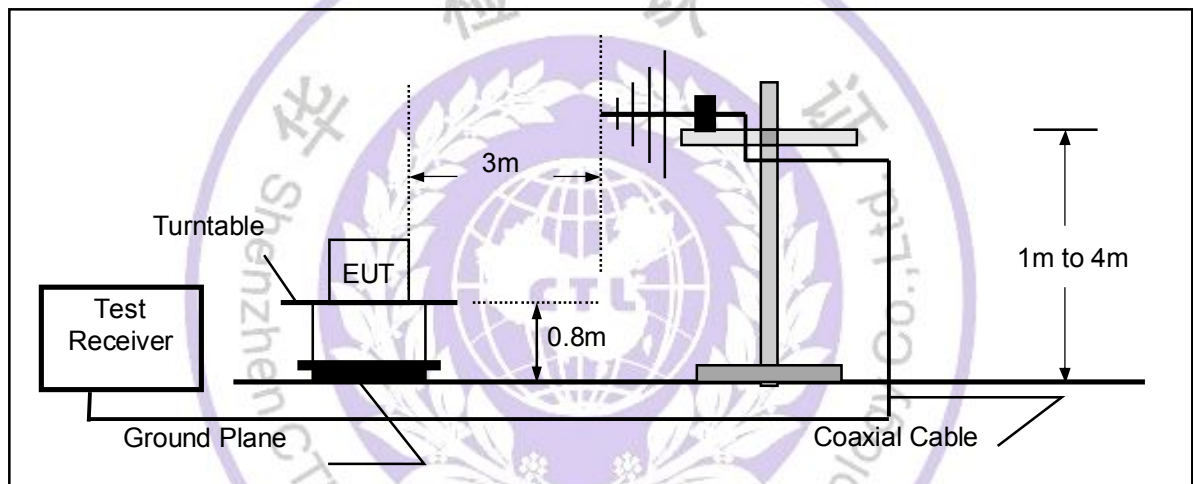
4.2. Radiated Emission Test

TEST CONFIGURATION

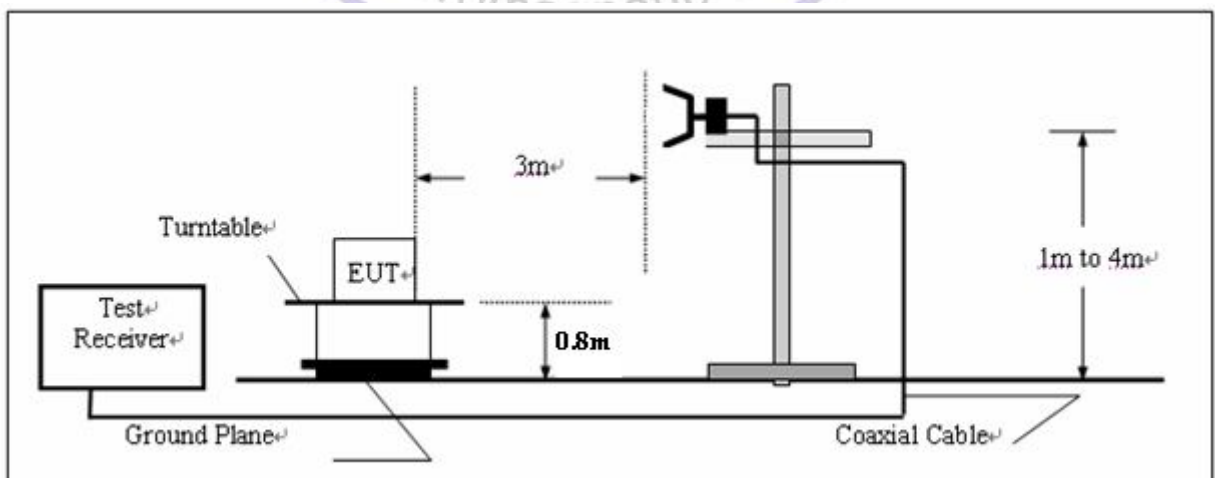
(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



(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), the EUT was setup according to ANSI C63.4: and tested according to ANSI C63.10 for compliance to FCC 47CFR 15.247 requirements.
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, 120 kHz for $f < 1$ GHz; VBW $\geq$ RBW; Sweep = auto; Detector function = peak; Trace = max hold.
6. Repeat above procedures until all frequency measurements have been completed.

Note:

When doing emission measurement above 1GHz, the horn antenna will be bended down a little (as horn antenna has the narrow beamwidth) in order to keeping the antenna in the “cone of radiation” of EUT. The 3dB beamwidth is 60 degrees for H-plane and 90 degrees for E-plane.

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

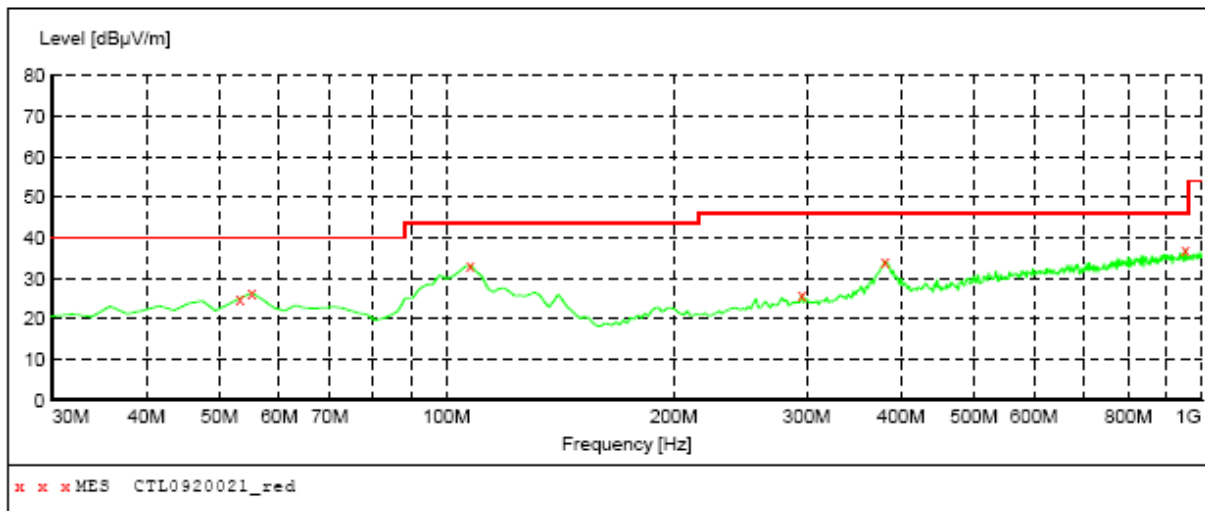
For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table. According to § 15.247(d), in any 100kHz bandwidth outside the frequency band in which the EUT is operating,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

TEST RESULTS**Below 1GHz:**

The radiated measurement are performed the each test mode (b/g/n) and channel (low/mid/high), the datum recorded below (802.11b mode, the middle channel) is the worst case for all the test mode and channel.

SWEEP TABLE: "test (30M-1G)"

Short Description:		Field Strength			
Start	Stop	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency				
30.0 MHz	1.0 GHz	MaxPeak	5.0 ms	100 kHz	VULB9163 NEW

***MEASUREMENT RESULT: "CTL0920021_red"***

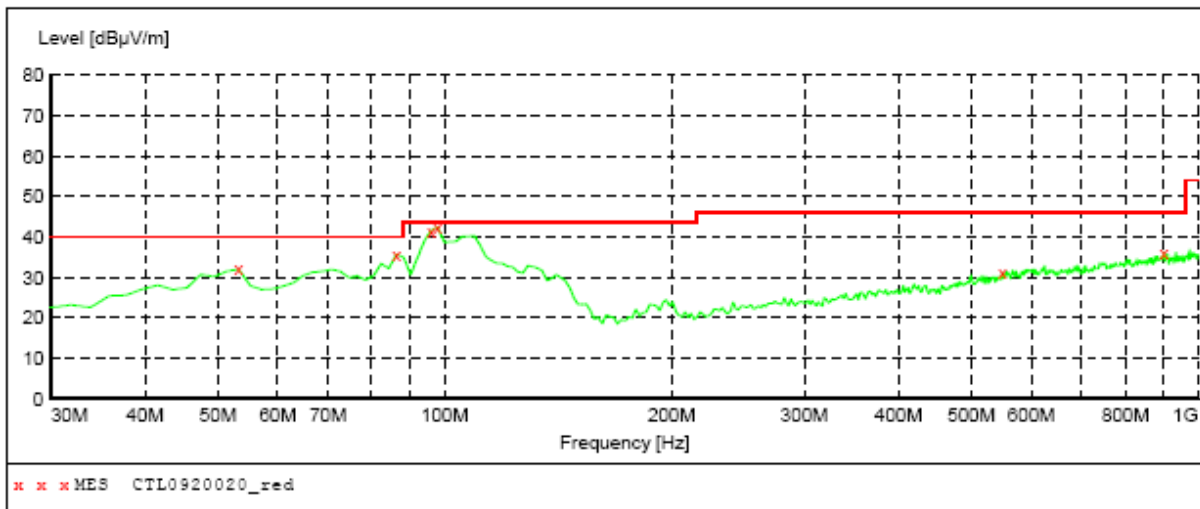
9/20/2012 17:54

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
53.280000	25.10	15.7	40.0	14.9	---	300.0	0.00	HORIZONTAL
55.220000	26.40	15.6	40.0	13.6	---	300.0	0.00	HORIZONTAL
107.600000	33.20	16.8	43.5	10.3	---	300.0	0.00	HORIZONTAL
295.780000	25.90	18.6	46.0	20.1	---	300.0	0.00	HORIZONTAL
381.140000	34.30	20.9	46.0	11.7	---	100.0	0.00	HORIZONTAL
953.440000	37.00	29.6	46.0	9.0	---	300.0	0.00	HORIZONTAL

Electromagnetic Tech

SWEEP TABLE: "test (30M-1G)"

Short Description:		Field Strength			
Start	Stop	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency				
30.0 MHz	1.0 GHz	MaxPeak	5.0 ms	100 kHz	VULB9163 NEW

***MEASUREMENT RESULT: "CTL0920020_red"***

9/20/2012 17:51

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
53.280000	32.00	15.7	40.0	8.0	---	100.0	0.00	VERTICAL
86.260000	35.70	14.8	40.0	4.3	---	100.0	0.00	VERTICAL
95.960000	41.60	17.2	43.5	1.9	---	100.0	0.00	VERTICAL
97.900000	42.50	17.4	43.5	1.0	---	100.0	0.00	VERTICAL
549.920000	31.10	25.0	46.0	14.9	---	100.0	0.00	VERTICAL
901.060000	36.20	29.2	46.0	9.8	---	100.0	0.00	VERTICAL

Remark:

- (1) Measuring frequencies from 9 KHz to the 1GHz, Loop Antenna used below 30MHz. See Section 3.6 table item 20. Radiated emission test from 9KHz to 30MHz was verified, and no any emission was found except system noise floor.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) Datas of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured. The test results from 9KHz to 25MHz are not reported because the emissions levels that are 20dB below the official limit.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz. Below 30MHz was 10KHz.

Above 1GHz:

802.11b CH1

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	2390.00	50.46	PK	74.00	23.54	1.00 H	200	53.86	28.3	4.90	36.6	-3.30
1	2390.00	38.49	AV	54.00	15.51	1.00 H	200	41.89	28.3	4.90	36.6	-3.30
2	*2412.00	102.69	PK			1.00 H	333	106.09	28.3	4.90	36.6	-3.30
2	*2412.00	88.75	AV			1.00 H	333	92.15	28.3	4.90	36.6	-3.30
3	4824.00	60.12	PK	74.00	13.88	1.00 H	125	56.92	32.7	7.00	36.5	3.80
3	4824.00	50.00	AV	54.00	4.00	1.00 H	125	46.80	32.7	7.00	36.5	3.80
4	7236.00	62.12	PK	74.00	11.88	1.00 H	66	52.72	35.8	8.90	35.3	9.40
4	7236.00	47.23	AV	54.00	6.77	1.00 H	66	37.83	35.8	8.90	35.3	9.40
5	9648.00	64.20	PK	74.00	9.80	1.00 H	264	51.60	37.2	10.20	34.8	12.60
5	9648.00	50.11	AV	54.00	3.89	1.00 H	264	37.51	37.2	10.20	34.8	12.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	2390.00	51.61	PK	74.00	22.39	1.0	236	55.01	28.3	4.90	36.6	-3.30
1	2390.00	44.98	AV	54.00	9.02	1.0	236	48.38	28.3	4.90	36.6	-3.30
2	*2412.00	112.56	PK			1.0	100	115.96	28.3	4.90	36.6	-3.30
2	*2412.00	107.78	AV			1.0	100	111.18	28.3	4.90	36.6	-3.30
3	4824.00	61.10	PK	74.00	12.90	1.0	312	57.90	32.7	7.00	36.5	3.80
3	4824.00	48.23	AV	54.00	5.77	1.0	312	45.03	32.7	7.00	36.5	3.80
4	7236.00	63.56	PK	74.00	10.44	1.0	46	54.16	35.8	8.90	35.3	9.40
4	7236.00	49.44	AV	54.00	4.56	1.0	46	40.04	35.8	8.90	35.3	9.40
5	9648.00	66.00	PK	74.00	8.00	1.0	108	53.40	37.2	10.20	34.8	12.60
5	9648.00	49.14	AV	54.00	4.86	1.0	108	36.54	37.2	10.20	34.8	12.60

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor
3. The other emission levels were very low against the limit.
4. Margin value = Limit value - Emission level.
5. The limit value is defined as per 15.247
6. "*" : Fundamental frequency
7. For Wireless 802.11b mode at 11Mbps.

802.11b CH6

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	*2437.00	103.23			1.00 H	153	106.43	28.3	5.10	-36.6	-3.20
1	*2437.00	92.33			1.00 H	153	95.53	28.3	5.10	-36.6	-3.20
2	4874.00	52.23	74.00	21.77	1.00 H	202	48.83	32.3	7.60	-36.5	3.40
2	4874.00	40.14	54.00	13.86	1.00 H	202	36.74	32.3	7.60	-36.5	3.40
3	7311.00	56.45	74.00	17.55	1.00 H	355	47.05	36.1	8.60	-35.3	9.40
3	7311.00	42.23	54.00	11.77	1.00 H	355	32.83	36.1	8.60	-35.3	9.40
4	9748.00	60.14	74.00	13.86	1.00 H	28	47.54	37.2	10.20	-34.8	12.60
4	9748.00	48.14	54.00	5.86	1.00 H	28	35.54	37.2	10.20	-34.8	12.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	*2437.00	109.23			1.00 V	121	112.43	28.3	5.10	-36.6	-3.20
1	*2437.00	98.12			1.00 V	121	101.32	28.3	5.10	-36.6	-3.20
2	4874.00	55.44	74.00	18.56	1.00 V	97	52.04	32.3	7.60	-36.5	3.40
2	4874.00	46.17	54.00	7.83	1.00 V	97	42.77	32.3	7.60	-36.5	3.40
3	7311.00	57.23	74.00	16.77	1.00 V	288	47.83	36.1	8.60	-35.3	9.40
3	7311.00	49.10	54.00	4.90	1.00 V	288	39.70	36.1	8.60	-35.3	9.40
4	9748.00	59.36	74.00	14.64	1.00 V	89	46.76	37.2	10.20	-34.8	12.60
4	9748.00	49.20	54.00	4.80	1.00 V	89	36.60	37.2	10.20	-34.8	12.60

REMARKS:

1. Emission level (dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB))+ Pre-amplifier Factor
3. The other emission levels were very low against the limit.
4. Margin value = Limit value- Emission level.
5. The limit value is defined as per 15.247
6. “* “: Fundamental frequency
7. For Wireless 802.11b mode at 11Mbps.

802.11b CH11

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	*2462.00	103.35			1.00 H	154	106.65	28.6	4.70	-36.6	-3.30
1	*2462.00	92.99			1.00 H	154	96.29	28.6	4.70	-36.6	-3.30
2	2483.50	49.48	74.00	24.52	1.00 H	146	52.78	28.6	4.70	-36.6	-3.30
2	2483.50	38.43	54.00	15.57	1.00 H	146	41.73	28.6	4.70	-36.6	-3.30
3	4022.04	56.12	74.00	17.88	1.00 H	341	54.22	32.2	6.20	-36.5	1.90
3	4022.04	49.01	54.00	4.99	1.00 H	341	47.11	32.2	6.20	-36.5	1.90
4	4924.00	54.63	74.00	19.37	1.00 H	100	50.83	33.0	7.00	-36.2	3.80
4	4924.00	45.11	54.00	8.89	1.00 H	100	41.31	33.0	7.00	-36.2	3.80
5	7386.00	59.00	74.00	15.00	1.00 H	190	49.60	36.2	8.50	-35.3	9.40
5	7386.00	48.03	54.00	5.97	1.00 H	190	38.63	36.2	8.50	-35.3	9.40
6	9848.00	60.22	74.00	13.78	1.00 H	113	47.62	37.2	10.20	-34.8	12.60
6	9848.00	50.07	54.00	3.93	1.00 H	113	37.47	37.2	10.20	-34.8	12.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	*2462.00	113.06			1.00 V	247	116.36	28.6	4.70	-36.6	-3.30
1	*2462.00	107.69			1.00 V	247	110.99	28.6	4.70	-36.6	-3.30
2	2483.50	51.86	74.00	22.14	1.00 V	150	55.16	28.6	4.70	-36.6	-3.30
2	2483.50	46.52	54.00	7.48	1.00 V	150	49.82	28.6	4.70	-36.6	-3.30
3	4022.04	52.02	74.00	21.98	1.00 V	299	50.12	32.2	6.20	-36.5	1.90
3	4022.04	44.11	54.00	9.89	1.00 V	299	42.21	32.2	6.20	-36.5	1.90
4	4924.00	54.00	74.00	20.00	1.00 V	90	50.20	33.0	7.00	-36.2	3.80
4	4924.00	43.14	54.00	10.86	1.00 V	90	39.34	33.0	7.00	-36.2	3.80
5	7386.00	58.88	74.00	15.12	1.00 V	29	49.48	36.2	8.50	-35.3	9.40
5	7386.00	46.61	54.00	7.39	1.00 V	29	37.21	36.2	8.50	-35.3	9.40
6	9848.00	60.00	74.00	14.00	1.00 V	222	47.40	37.2	10.20	-34.8	12.60
6	9848.00	49.23	54.00	4.77	1.00 V	222	36.63	37.2	10.20	-34.8	12.60

REMARKS:

1. Emission level (dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB))+ Pre-amplifier Factor
3. The other emission levels were very low against the limit.
4. Margin value = Limit value- Emission level.
5. The limit value is defined as per 15.247
6. "*" : Fundamental frequency
7. For Wireless 802.11b mode at 11Mbps.

802.11g CH1

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	2390.00	61.33	PK	74.00	12.67	1.00 H	247	64.63	28.3	5.00	36.6	-3.30
1	2390.00	44.54	AV	54.00	9.46	1.00 H	247	47.84	28.3	5.00	36.6	-3.30
2	*2412.00	100.32	PK			1.00 H	100	103.62	28.3	5.00	36.6	-3.30
2	*2412.00	84.74	AV			1.00 H	100	88.04	28.3	5.00	36.6	-3.30
3	4824.00	58.14	PK	74.00	15.86	1.00 H	89	54.34	32.7	7.30	36.2	3.80
3	4824.00	47.96	AV	54.00	6.04	1.00 H	89	44.16	32.7	7.30	36.2	3.80
4	7236.00	62.22	PK	74.00	11.78	1.00 H	345	52.82	35.8	8.90	35.3	9.40
4	7236.00	48.60	AV	54.00	5.40	1.00 H	345	39.20	35.8	8.90	35.3	9.40
5	9648.00	64.17	PK	74.00	9.83	1.00 H	121	51.57	37.2	10.20	34.8	12.60
5	9648.00	50.25	AV	54.00	3.75	1.00 H	121	37.65	37.2	10.20	34.8	12.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	2390.00	69.66	PK	74.00	4.34	1.00 V	288	72.96	28.3	5.00	36.6	-3.30
1	2390.00	50.63	AV	54.00	3.37	1.00 V	288	53.93	28.3	5.00	36.6	-3.30
2	*2412.00	110.40	PK			1.00 V	69	113.70	28.3	5.00	36.6	-3.30
2	*2412.00	94.98	AV			1.00 V	69	98.28	28.3	5.00	36.6	-3.30
3	4824.00	58.88	PK	74.00	15.12	1.00 V	291	55.08	32.7	7.30	36.2	3.80
3	4824.00	46.99	AV	54.00	7.01	1.00 V	291	43.19	32.7	7.30	36.2	3.80
4	7236.00	61.44	PK	74.00	12.56	1.00 V	360	52.04	35.8	8.90	35.3	9.40
4	7236.00	48.00	AV	54.00	6.00	1.00 V	360	38.60	35.8	8.90	35.3	9.40
5	9648.00	65.22	PK	74.00	8.78	1.00 V	155	52.62	37.2	10.20	34.8	12.60
5	9648.00	50.47	AV	54.00	3.53	1.00 V	155	37.87	37.2	10.20	34.8	12.60

- REMARKS:**
1. Emission level (dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB))+ Pre-amplifier Factor
 3. The other emission levels were very low against the limit.
 4. Margin value = Limit value- Emission level.
 5. The limit value is defined as per 15.247
 6. “* “: Fundamental frequency
 7. For Wireless 802.11g mode at 54Mbps.

802.11g CH6

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	*2437.00	105.25			1.00 H	100	108.45	28.3	5.10	-36.6	-3.20
1	*2437.00	96.00			1.00 H	100	99.20	28.3	5.10	-36.6	-3.20
2	4874.00	56.50	74.00	17.50	1.00 H	214	53.10	32.8	7.10	-36.5	3.40
2	4874.00	47.23	54.00	6.77	1.00 H	214	43.83	32.8	7.10	-36.5	3.40
3	7311.00	57.70	74.00	16.30	1.00 H	0	48.30	36.1	8.60	-35.3	9.40
3	7311.00	48.60	54.00	5.40	1.00 H	0	39.20	36.1	8.60	-35.3	9.40
4	9748.00	59.63	74.00	14.37	1.00 H	163	47.03	37.2	10.20	-34.8	12.60
4	9748.00	49.50	54.00	4.50	1.00 H	163	36.90	37.2	10.20	-34.8	12.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	*2437.00	109.50			1.00 V	122	112.70	28.3	5.10	-36.6	-3.20
1	*2437.00	98.80			1.00 V	122	102.00	28.3	5.10	-36.6	-3.20
2	4874.00	56.90	74.00	17.10	1.00 V	100	53.50	32.8	7.10	-36.5	3.40
2	4874.00	45.45	54.00	8.55	1.00 V	100	42.05	32.8	7.10	-36.5	3.40
3	7311.00	58.17	74.00	15.83	1.00 V	356	48.77	36.1	8.60	-35.3	9.40
3	7311.00	48.65	54.00	5.35	1.00 V	356	39.25	36.1	8.60	-35.3	9.40
4	9748.00	60.58	74.00	13.42	1.00 V	26	47.98	37.2	10.20	-34.8	12.60
4	9748.00	49.20	54.00	4.80	1.00 V	26	36.60	37.2	10.20	-34.8	12.60

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)
 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) + Pre-amplifier Factor
 3. The other emission levels were very low against the limit.
 4. Margin value = Limit value - Emission level.
 5. The limit value is defined as per 15.247
 6. "*" : Fundamental frequency
 7. For Wireless 802.11g mode at 54Mbps.

802.11g CH11

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	*2462.00	100.21			1.00 H	156	103.51	28.2	5.10	-36.6	-3.30
1	*2462.00	84.73			1.00 H	156	88.03	28.2	5.10	-36.6	-3.30
2	2483.50	59.39	74.00	14.61	1.00 H	191	62.69	28.2	5.10	-36.6	-3.30
2	2483.50	42.28	54.00	11.72	1.00 H	191	45.58	28.2	5.10	-36.6	-3.30
3	4924.00	54.26	74.00	19.74	1.00 H	198	50.46	33.0	7.00	-36.2	3.80
3	4924.00	45.22	54.00	8.78	1.00 H	198	41.42	33.0	7.00	-36.2	3.80
4	7386.00	57.36	74.00	16.64	1.00 H	90	47.96	36.2	8.50	-35.3	9.40
4	7386.00	46.65	54.00	7.35	1.00 H	90	37.25	36.2	8.50	-35.3	9.40
5	9848.00	60.14	74.00	13.86	1.00 H	124	47.54	37.3	10.10	-34.8	12.60
5	9848.00	50.00	54.00	4.00	1.00 H	124	37.40	37.3	10.10	-34.8	12.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	*2462.00	106.70			1.00 V	125	110.00	28.2	5.10	-36.6	-3.30
1	*2462.00	94.49			1.00 V	125	97.79	28.2	5.10	-36.6	-3.30
2	2483.50	66.73	74.00	7.27	1.00 V	348	70.03	28.2	5.10	-36.6	-3.30
2	2483.50	50.92	54.00	3.08	1.00 V	348	54.22	28.2	5.10	-36.6	-3.30
3	4924.00	56.11	74.00	17.89	1.00 V	96	52.31	33.0	7.00	-36.2	3.80
3	4924.00	47.82	54.00	6.18	1.00 V	96	44.02	33.0	7.00	-36.2	3.80
4	7386.00	56.24	74.00	17.76	1.00 V	35	46.84	36.2	8.50	-35.3	9.40
4	7386.00	45.00	54.00	9.00	1.00 V	35	35.60	36.2	8.50	-35.3	9.40
5	9848.00	60.00	74.00	14.00	1.00 V	37	47.40	37.3	10.10	-34.8	12.60
5	9848.00	50.26	54.00	3.74	1.00 V	37	37.66	37.3	10.10	-34.8	12.60

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)
 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) + Pre-amplifier Factor
 3. The other emission levels were very low against the limit.
 4. Margin value = Limit value - Emission level.
 5. The limit value is defined as per 15.247
 6. " * " : Fundamental frequency
 7. For Wireless 802.11g mode at 54Mbps.

802.11n (20MHz) Channel 1

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	2390.00	56.96	PK	74.00	17.04	1.00 H	144	60.26	28.3	5.00	36.6	-3.30
1	2390.00	44.33	AV	54.00	9.67	1.00 H	144	47.63	28.3	5.00	36.6	-3.30
2	*2412.00	98.38	PK			1.00 H	256	101.68	28.3	5.00	36.6	-3.30
2	*2412.00	81.55	AV			1.00 H	256	84.85	28.3	5.00	36.6	-3.30
3	4824.00	48.25	PK	74.00	25.75	1.00 H	88	44.45	32.7	7.30	36.2	3.80
3	4824.00	40.00	AV	54.00	14.00	1.00 H	88	36.20	32.7	7.30	36.2	3.80
4	7236.00	54.36	PK	74.00	19.64	1.00 H	331	44.96	35.8	8.90	35.3	9.40
4	7236.00	45.22	AV	54.00	8.78	1.00 H	331	35.82	35.8	8.90	35.3	9.40
5	9648.00	59.68	PK	74.00	14.32	1.00 H	105	47.08	37.2	10.20	34.8	12.60
5	9648.00	49.25	AV	54.00	4.75	1.00 H	105	36.65	37.2	10.20	34.8	12.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	2390.00	69.20	PK	74.00	4.80	1.00 V	125	72.50	28.3	5.00	36.6	-3.30
1	2390.00	50.90	AV	54.00	3.10	1.00 V	125	54.20	28.3	5.00	36.6	-3.30
2	*2412.00	112.09	PK			1.00 V	236	115.39	28.3	5.00	36.6	-3.30
2	*2412.00	95.33	AV			1.00 V	236	98.63	28.3	5.00	36.6	-3.30
3	4824.00	50.23	PK	74.00	23.77	1.00 V	179	46.43	32.7	7.30	36.2	3.80
3	4824.00	42.02	AV	54.00	11.98	1.00 V	179	38.22	32.7	7.30	36.2	3.80
4	7236.00	56.96	PK	74.00	17.04	1.00 V	313	47.56	35.8	8.90	35.3	9.40
4	7236.00	46.74	AV	54.00	7.26	1.00 V	313	37.34	35.8	8.90	35.3	9.40
5	9648.00	60.23	PK	74.00	13.77	1.00 V	5	47.63	37.2	10.20	34.8	12.60
5	9648.00	50.08	AV	54.00	3.92	1.00 V	5	37.48	37.2	10.20	34.8	12.60

- REMARKS:**
1. Emission level (dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) -Pre-amplifier Factor
 3. The other emission levels were very low against the limit.
 4. Margin value = Limit value- Emission level.
 5. The limit value is defined as per 15.247
 6. "*" : Fundamental frequency

802.11n (20MHz) Channel 6

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	*2437.00	102.55	PK			1.00 H	223	105.75	28.3	5.10	36.6	-3.20
1	*2437.00	89.47	AV			1.00 H	122	92.67	28.3	5.10	36.6	-3.20
2	4874.00	56.14	PK	74.00	17.86	1.00 H	5	52.74	32.8	7.10	36.5	3.40
2	4874.00	47.58	AV	54.00	6.42	1.00 H	5	44.18	32.8	7.10	36.5	3.40
3	7311.00	58.67	PK	74.00	15.33	1.00 H	124	49.27	36.1	8.60	35.3	9.40
3	7311.00	46.11	AV	54.00	7.89	1.00 H	124	36.71	36.1	8.60	35.3	9.40
4	9748.00	60.56	PK	74.00	13.44	1.00 H	325	47.96	37.2	10.20	34.8	12.60
4	9748.00	49.98	AV	54.00	4.02	1.00 H	325	37.38	37.2	10.20	34.8	12.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	*2437.00	107.64	PK			1.00 V	125	110.84	28.3	5.10	36.6	-3.20
1	*2437.00	95.47	AV			1.00 V	125	98.67	28.3	5.10	36.6	-3.20
2	4874.00	55.63	PK	74.00	18.37	1.00 V	289	52.23	32.8	7.10	36.5	3.40
2	4874.00	46.85	AV	54.00	7.15	1.00 V	289	43.45	32.8	7.10	36.5	3.40
3	7311.00	58.55	PK	74.00	15.45	1.00 V	0	49.15	36.1	8.60	35.3	9.40
3	7311.00	47.82	AV	54.00	6.18	1.00 V	0	38.42	36.1	8.60	35.3	9.40
4	9748.00	60.28	PK	74.00	13.72	1.00 V	180	47.68	37.2	10.20	34.8	12.60
4	9748.00	50.25	AV	54.00	3.75	1.00 V	180	37.65	37.2	10.20	34.8	12.60

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)
 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor
 3. The other emission levels were very low against the limit.
 4. Margin value = Limit value - Emission level.
 5. The limit value is defined as per 15.247
 6. “*”: Fundamental frequency

802.11n (20MHz) Channel 11

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	*2462.00	99.01	PK			1.00 H	122	102.31	28.2	5.10	36.6	-3.30
1	*2462.00	82.48	AV			1.00 H	122	85.78	28.2	5.10	36.6	-3.30
2	2483.50	60.79	PK	74.00	13.21	1.00 H	300	64.09	28.2	5.10	36.6	-3.30
2	2483.50	43.98	AV	54.00	10.02	1.00 H	300	47.28	28.2	5.10	36.6	-3.30
3	4924.00	54.55	PK	74.00	19.45	1.00 H	156	50.75	33.0	7.00	36.2	3.80
3	4924.00	40.29	AV	54.00	13.71	1.00 H	156	36.49	33.0	7.00	36.2	3.80
4	7386.00	58.00	PK	74.00	16.00	1.00 H	334	48.60	36.2	8.50	35.3	9.40
4	7386.00	47.69	AV	54.00	6.31	1.00 H	334	38.29	36.2	8.50	35.3	9.40
5	9848.00	61.23	PK	74.00	12.77	1.00 H	278	48.63	37.3	10.10	34.8	12.60
5	9848.00	50.07	AV	54.00	3.93	1.00 H	278	37.47	37.3	10.10	34.8	12.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	*2462.00	112.80	PK			1.00 V	125	116.10	28.2	5.10	36.6	-3.30
1	*2462.00	92.96	AV			1.00 V	125	96.26	28.2	5.10	36.6	-3.30
2	2483.50	70.05	PK	74.00	3.95	1.00 V	189	73.35	28.2	5.10	36.6	-3.30
2	2483.50	50.24	AV	54.00	3.76	1.00 V	189	53.54	28.2	5.10	36.6	-3.30
3	4924.00	56.26	PK	74.00	17.74	1.00 V	347	52.46	33.0	7.00	36.2	3.80
3	4924.00	48.11	AV	54.00	5.89	1.00 V	347	44.31	33.0	7.00	36.2	3.80
4	7386.00	58.23	PK	74.00	15.77	1.00 V	12	48.83	36.2	8.50	35.3	9.40
4	7386.00	47.63	AV	54.00	6.37	1.00 V	12	38.23	36.2	8.50	35.3	9.40
5	9848.00	60.12	PK	74.00	13.88	1.00 V	208	47.52	37.3	10.10	34.8	12.60
5	9848.00	50.07	AV	54.00	3.93	1.00 V	208	37.47	37.3	10.10	34.8	12.60

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)
 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor
 3. The other emission levels were very low against the limit.
 4. Margin value = Limit value - Emission level.
 5. The limit value is defined as per 15.247
 6. " * " : Fundamental frequency

802.11n (40MHz) Channel 3

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	2390.00	59.53	PK	74.00	14.47	1.00 H	236	62.83	28.3	5.00	36.6	-3.30
1	2390.00	42.51	AV	54.00	11.49	1.00 H	236	45.81	28.3	5.00	36.6	-3.30
2	*2422.00	94.02	PK			1.00 H	100	97.32	28.3	5.00	36.6	-3.30
2	*2422.00	75.18	AV			1.00 H	100	78.48	28.3	5.00	36.6	-3.30
3	4844.00	54.98	PK	74.00	19.02	1.00 H	197	51.18	32.7	7.30	36.2	3.80
3	4844.00	40.11	AV	54.00	13.89	1.00 H	197	36.31	32.7	7.30	36.2	3.80
4	7266.00	58.36	PK	74.00	15.64	1.00 H	306	48.96	35.8	8.90	35.3	9.40
4	7266.00	47.25	AV	54.00	6.75	1.00 H	306	37.85	35.8	8.90	35.3	9.40
5	9688.00	60.00	PK	74.00	14.00	1.00 H	17	47.40	37.2	10.20	34.8	12.60
5	9688.00	49.00	AV	54.00	5.00	1.00 H	17	36.40	37.2	10.20	34.8	12.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	2390.00	70.83	PK	74.00	3.17	1.00 V	122	74.13	28.3	5.00	36.6	-3.30
1	2390.00	50.46	AV	54.00	3.54	1.00 V	122	53.76	28.3	5.00	36.6	-3.30
2	*2422.00	108.32	PK			1.00 V	189	111.62	28.3	5.00	36.6	-3.30
2	*2422.00	90.93	AV			1.00 V	189	94.23	28.3	5.00	36.6	-3.30
3	4844.00	56.03	PK	74.00	17.97	1.00 V	257	52.23	32.7	7.30	36.2	3.80
3	4844.00	45.11	AV	54.00	8.89	1.00 V	257	41.31	32.7	7.30	36.2	3.80
4	7266.00	58.69	PK	74.00	15.31	1.00 V	155	49.29	35.8	8.90	35.3	9.40
4	7266.00	47.82	AV	54.00	6.18	1.00 V	155	38.42	35.8	8.90	35.3	9.40
5	9688.00	60.56	PK	74.00	13.44	1.00 V	334	47.96	37.2	10.20	34.8	12.60
5	9688.00	50.04	AV	54.00	3.96	1.00 V	334	37.44	37.2	10.20	34.8	12.60

- REMARKS:**
1. Emission level (dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) -Pre-amplifier Factor
 3. The other emission levels were very low against the limit.
 4. Margin value = Limit value- Emission level.
 5. The limit value is defined as per 15.247
 6. “* “: Fundamental frequency

802.11n (40MHz) Channel 6

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	*2437.00	99.15	PK			1.00 H	100	102.35	28.3	5.10	36.6	-3.20
1	*2437.00	84.36	AV			1.00 H	100	87.56	28.3	5.10	36.6	-3.20
2	4874.00	55.89	PK	74.00	18.11	1.00 H	198	52.49	32.3	7.60	36.5	3.40
2	4874.00	46.23	AV	54.00	7.77	1.00 H	198	42.83	32.3	7.60	36.5	3.40
3	7311.00	57.85	PK	74.00	16.15	1.00 H	203	48.45	36.1	8.60	35.3	9.40
3	7311.00	46.89	AV	54.00	7.11	1.00 H	203	37.49	36.1	8.60	35.3	9.40
4	9748.00	60.91	PK	74.00	13.09	1.00 H	56	48.31	37.2	10.20	34.8	12.60
4	9748.00	50.17	AV	54.00	3.83	1.00 H	56	37.57	37.2	10.20	34.8	12.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	*2437.00	109.14	PK			1.00 V	122	112.34	28.3	5.10	36.6	-3.20
1	*2437.00	96.51	AV			1.00 V	122	99.71	28.3	5.10	36.6	-3.20
2	4874.00	55.99	PK	74.00	18.01	1.00 V	96	52.59	32.3	7.60	36.5	3.40
2	4874.00	46.97	AV	54.00	7.03	1.00 V	96	43.57	32.3	7.60	36.5	3.40
3	7311.00	57.36	PK	74.00	16.64	1.00 V	26	47.96	36.1	8.60	35.3	9.40
3	7311.00	46.57	AV	54.00	7.43	1.00 V	26	37.17	36.1	8.60	35.3	9.40
4	9748.00	60.79	PK	74.00	13.21	1.00 V	299	48.19	37.2	10.20	34.8	12.60
4	9748.00	50.07	AV	54.00	3.93	1.00 V	299	37.47	37.2	10.20	34.8	12.60

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)
 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor
 3. The other emission levels were very low against the limit.
 4. Margin value = Limit value - Emission level.
 5. The limit value is defined as per 15.247
 6. "*" : Fundamental frequency

802.11n (40MHz) Channel 9

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	*2452.00	97.62	PK		1.00 H	125	100.92	28.2	5.20	36.6	-3.20
1	*2452.00	79.66	AV		1.00 H	125	82.96	28.2	5.20	36.6	-3.20
2	2483.50	63.38	PK	74.00	1.00 H	312	66.68	28.2	5.10	36.6	-3.30
2	2483.50	43.53	AV	54.00	1.00 H	312	46.83	28.2	5.10	36.6	-3.30
3	4904.00	55.87	PK	74.00	1.00 H	258	52.07	33.0	7.00	36.2	3.80
3	4904.00	45.23	AV	54.00	1.00 H	258	41.43	33.0	7.00	36.2	3.80
4	7356.00	58.11	PK	74.00	1.00 H	12	48.71	36.2	8.50	35.3	9.40
4	7356.00	47.36	AV	54.00	1.00 H	12	37.96	36.2	8.50	35.3	9.40
5	9808.00	60.25	PK	74.00	1.00 H	100	47.65	37.3	10.10	34.8	12.60
5	9808.00	50.00	AV	54.00	1.00 H	100	37.40	37.3	10.10	34.8	12.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
1	*2452.00	102.05	PK		1.00 V	125	105.35	28.2	5.20	36.6	-3.20
1	*2452.00	86.03	AV		1.00 V	125	89.33	28.2	5.20	36.6	-3.20
2	2483.50	68.26	PK	74.00	1.00 V	300	71.56	28.2	5.10	36.6	-3.30
2	2483.50	50.94	AV	54.00	1.00 V	300	54.24	28.2	5.10	36.6	-3.30
3	4904.00	56.01	PK	74.00	1.00 V	346	52.21	33.0	7.00	36.2	3.80
3	4904.00	46.98	AV	54.00	1.00 V	346	43.18	33.0	7.00	36.2	3.80
4	7356.00	57.82	PK	74.00	1.00 V	157	48.42	36.2	8.50	35.3	9.40
4	7356.00	47.96	AV	54.00	1.00 V	157	38.56	36.2	8.50	35.3	9.40
5	9808.00	60.39	PK	74.00	1.00 V	287	47.79	37.3	10.10	34.8	12.60
5	9808.00	49.28	AV	54.00	1.00 V	287	36.68	37.3	10.10	34.8	12.60

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)
 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor
 3. The other emission levels were very low against the limit.
 4. Margin value = Limit value - Emission level.
 5. The limit value is defined as per 15.247
 6. " * " : Fundamental frequency

Note:

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

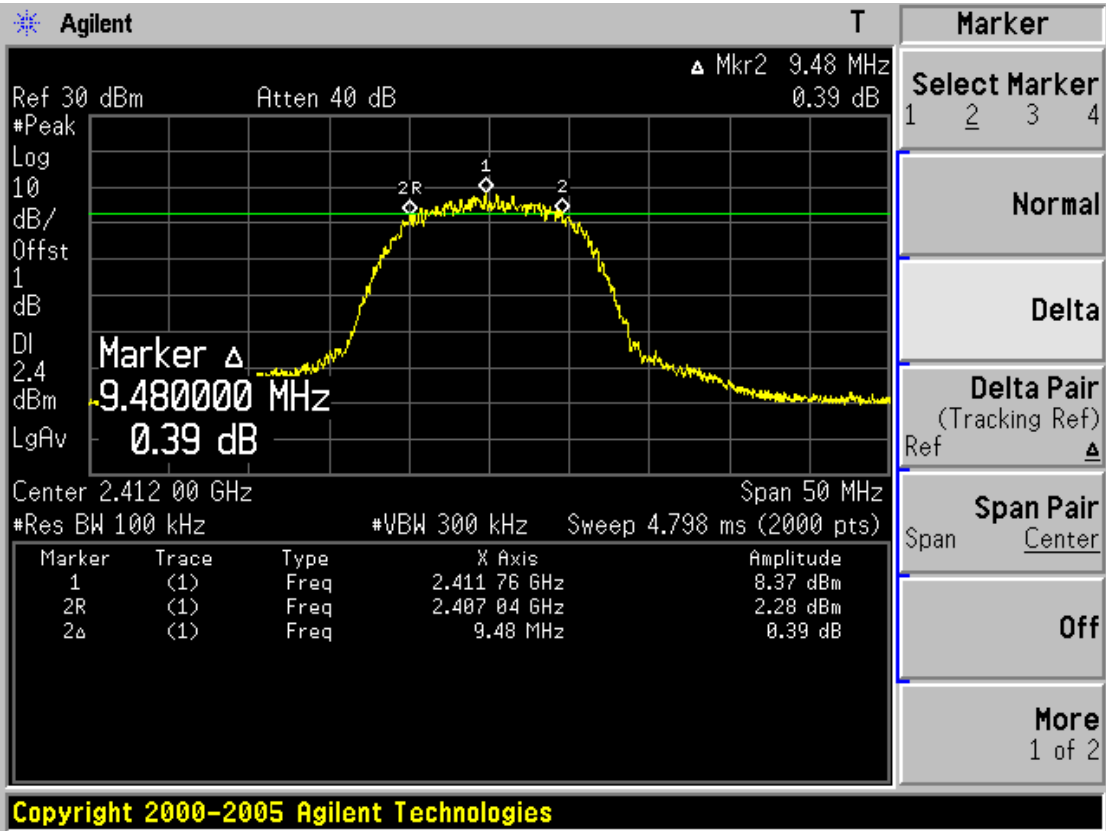
For digital modulation systems, the minimum 6 dB bandwidth shall be at least 500 kHz.

TEST RESULTS

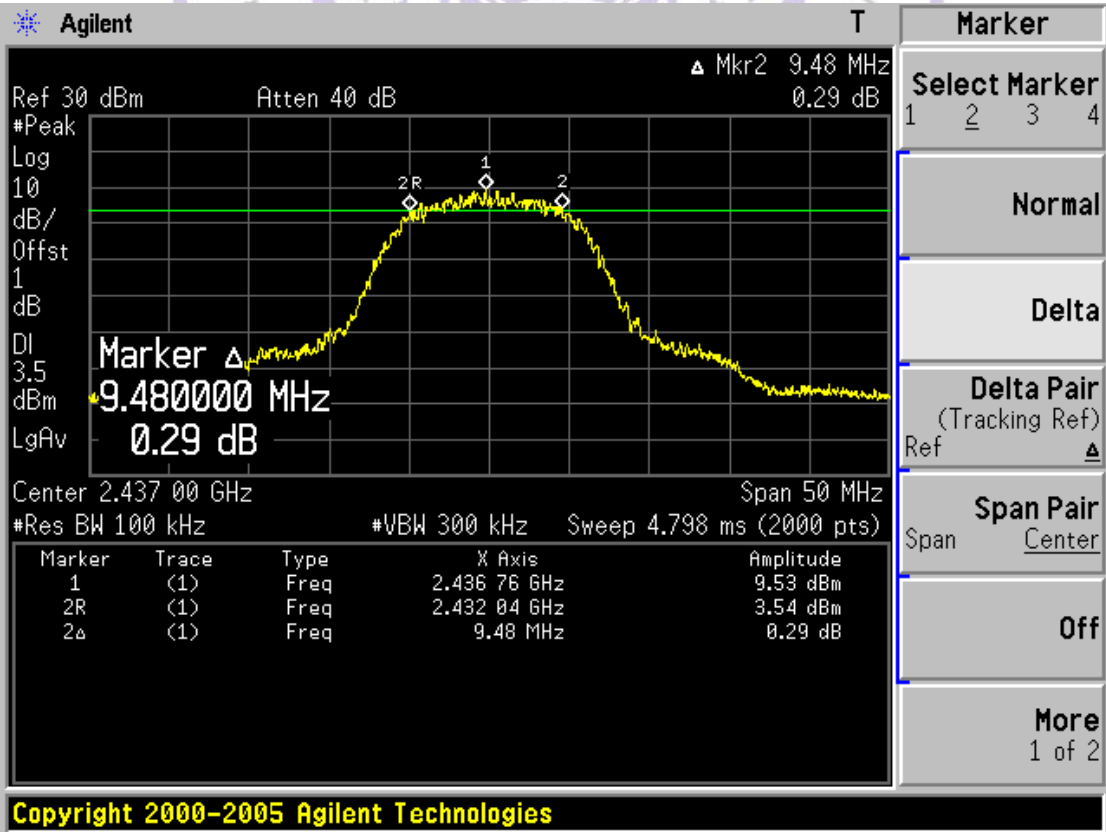
Mode	CHANNEL	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
802.11b	1	9.48	0.5	PASS
	6	9.48	0.5	PASS
	11	9.50	0.5	PASS
802.11g	1	16.58	0.5	PASS
	6	16.58	0.5	PASS
	11	16.58	0.5	PASS
802.11n HT20	1	17.81	0.5	PASS
	6	17.81	0.5	PASS
	11	17.81	0.5	PASS
802.11n HT40	3	36.47	0.5	PASS
	6	36.47	0.5	PASS
	9	36.47	0.5	PASS

For 802.11b:

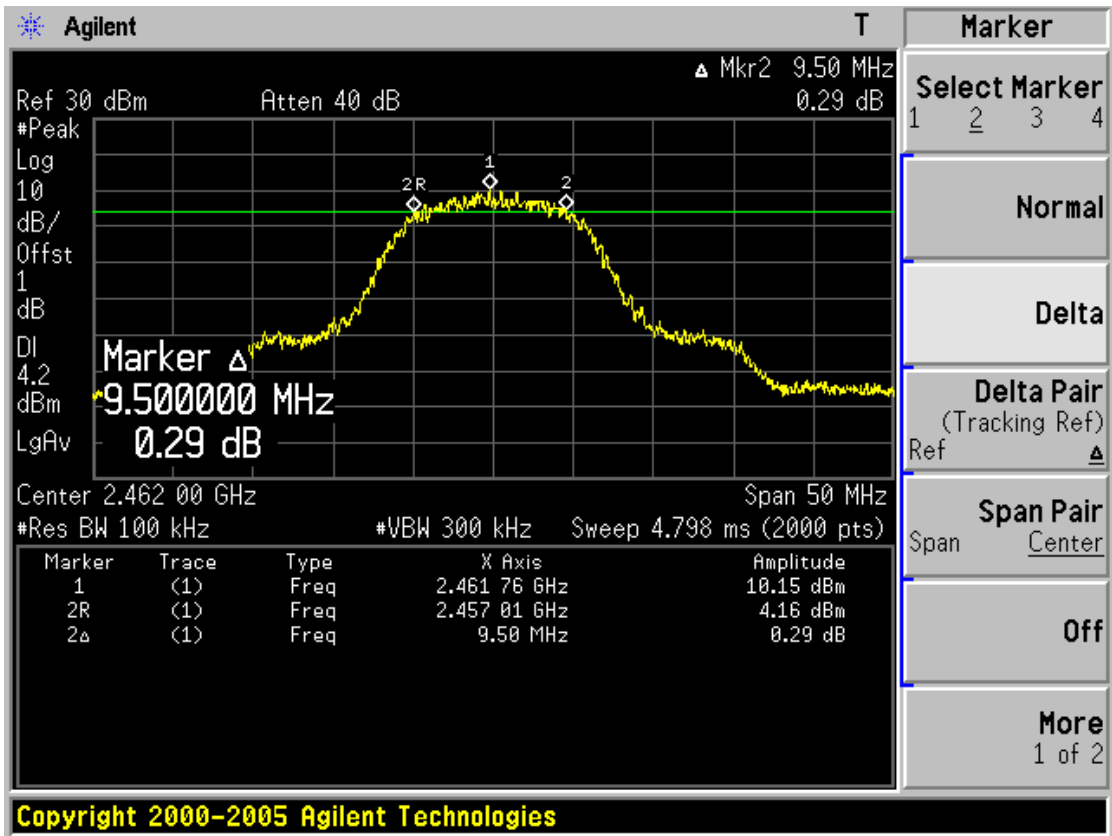
CH1



CH6

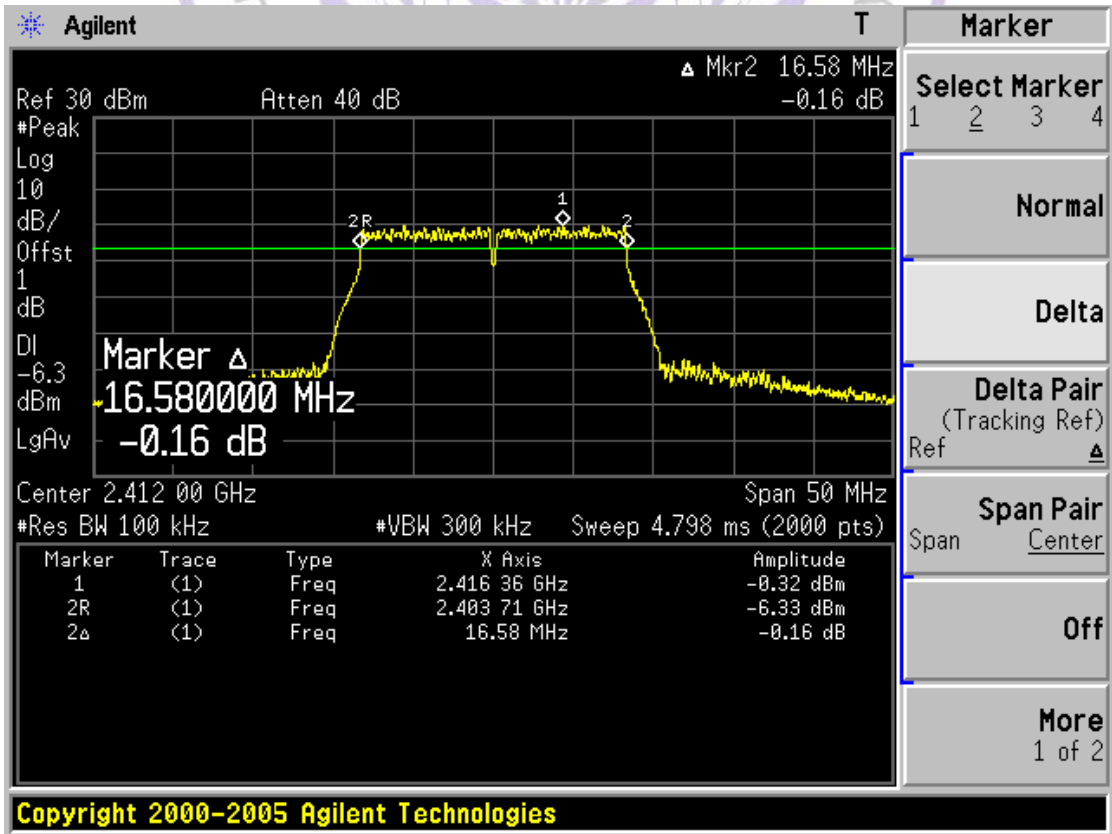


CH11

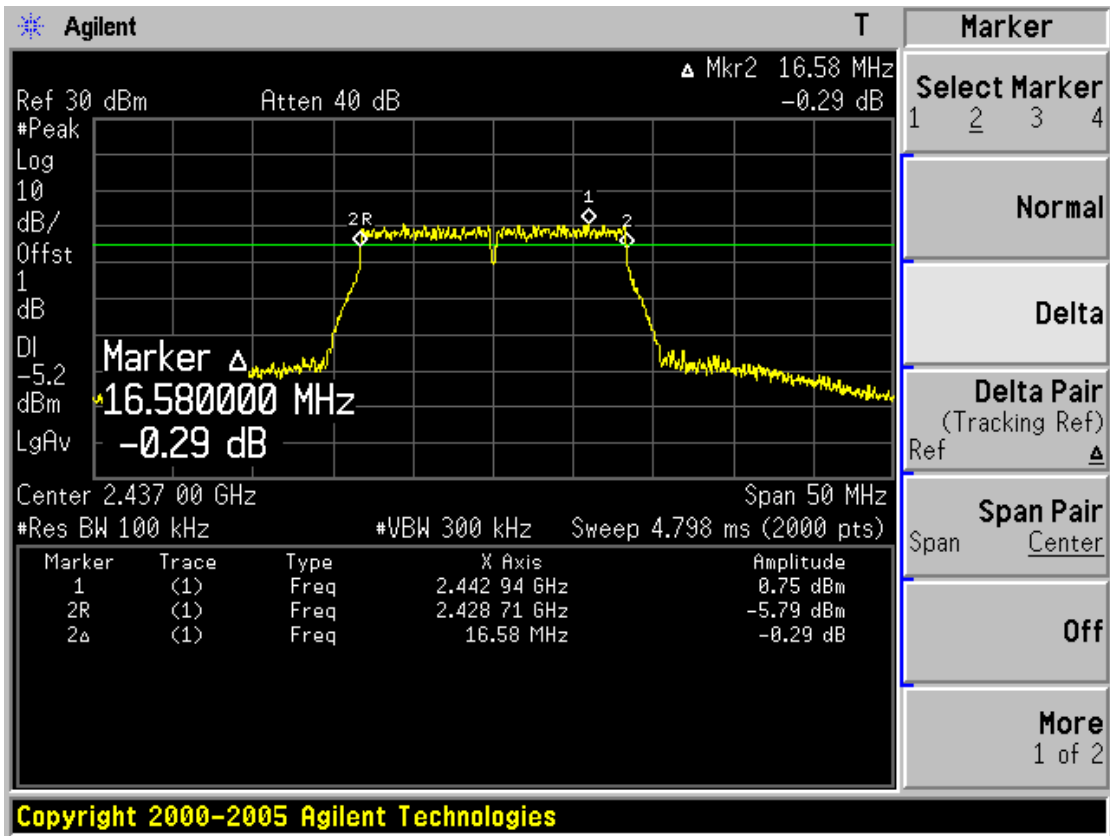


For 802.11g:

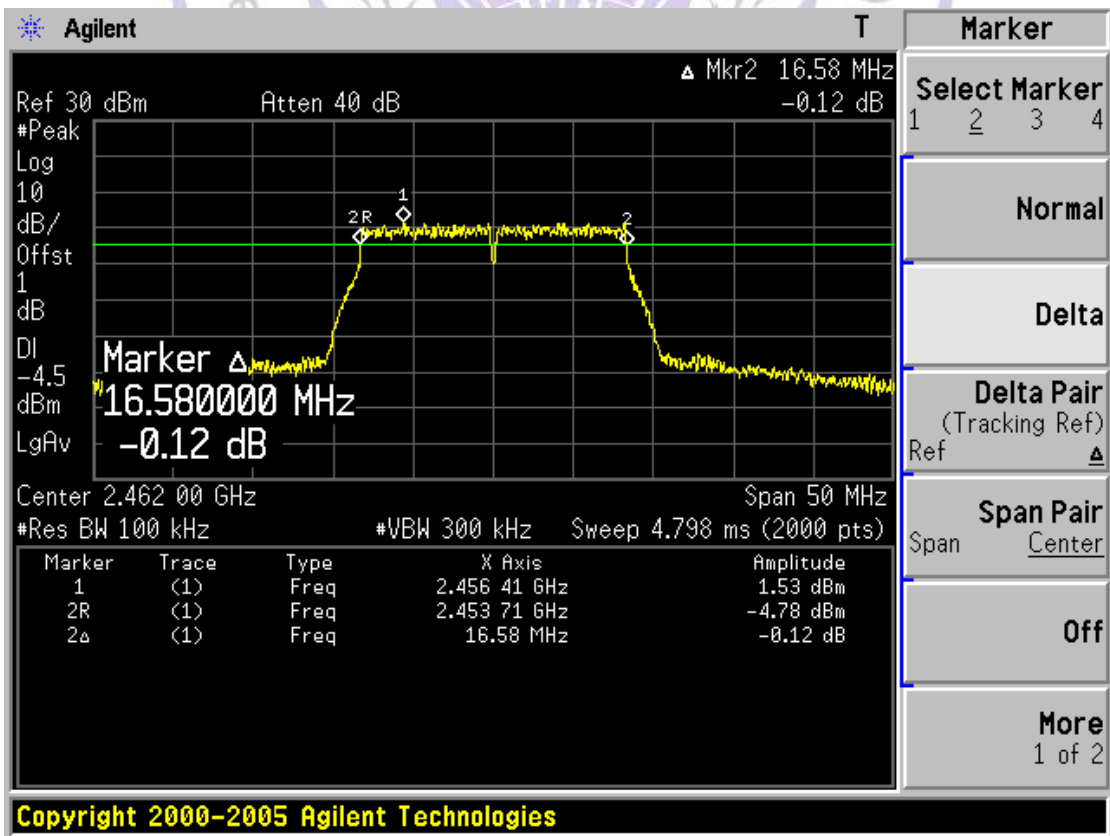
CH1



CH6

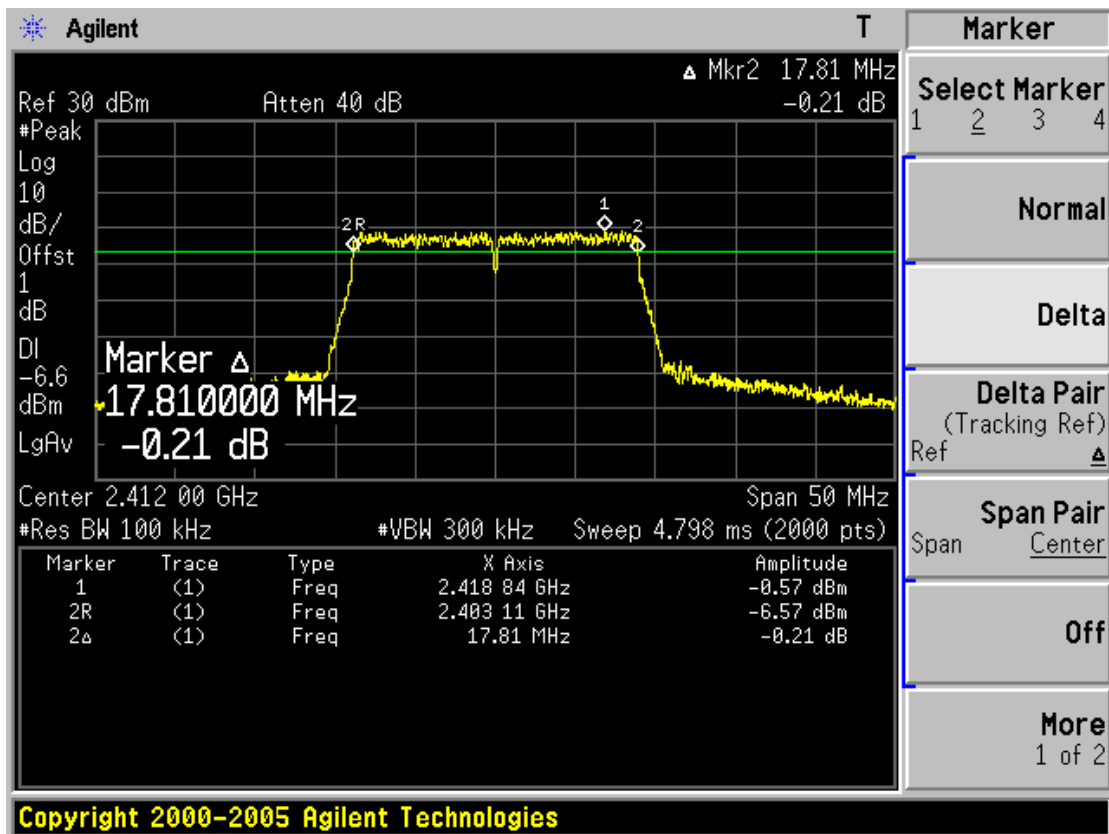


CH11

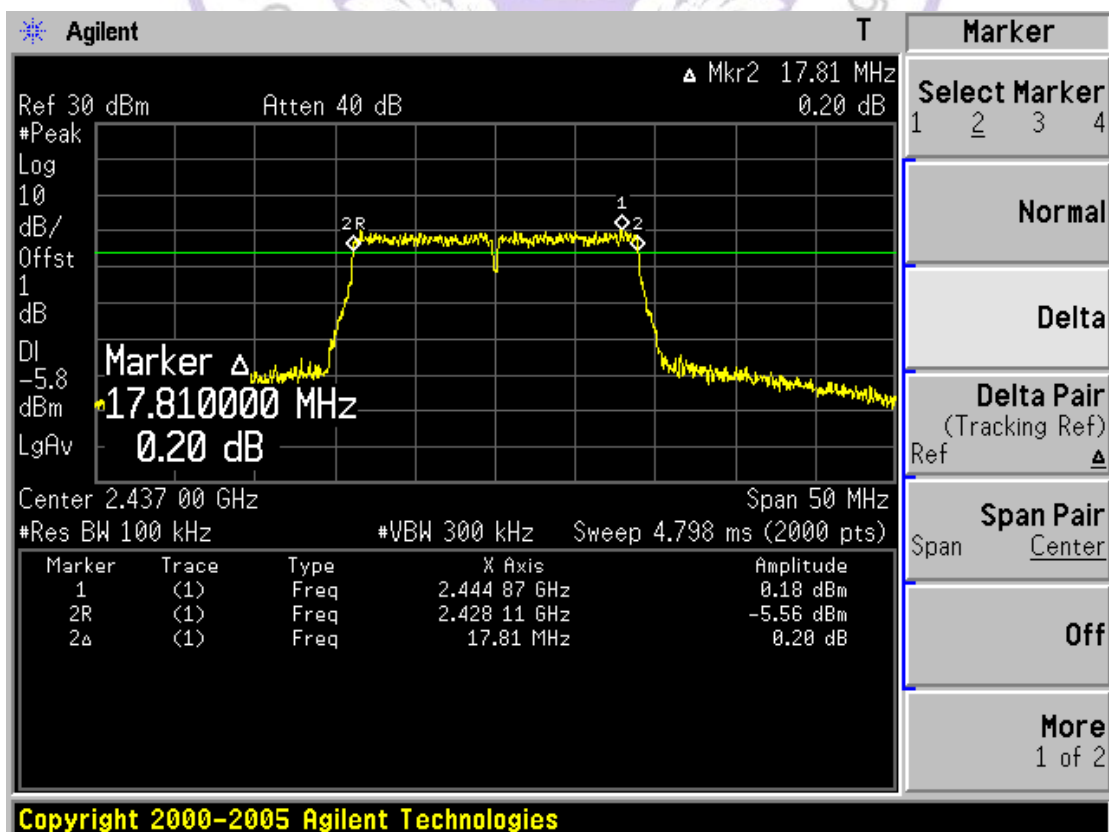


For 802.11n (20MHz) Mode:

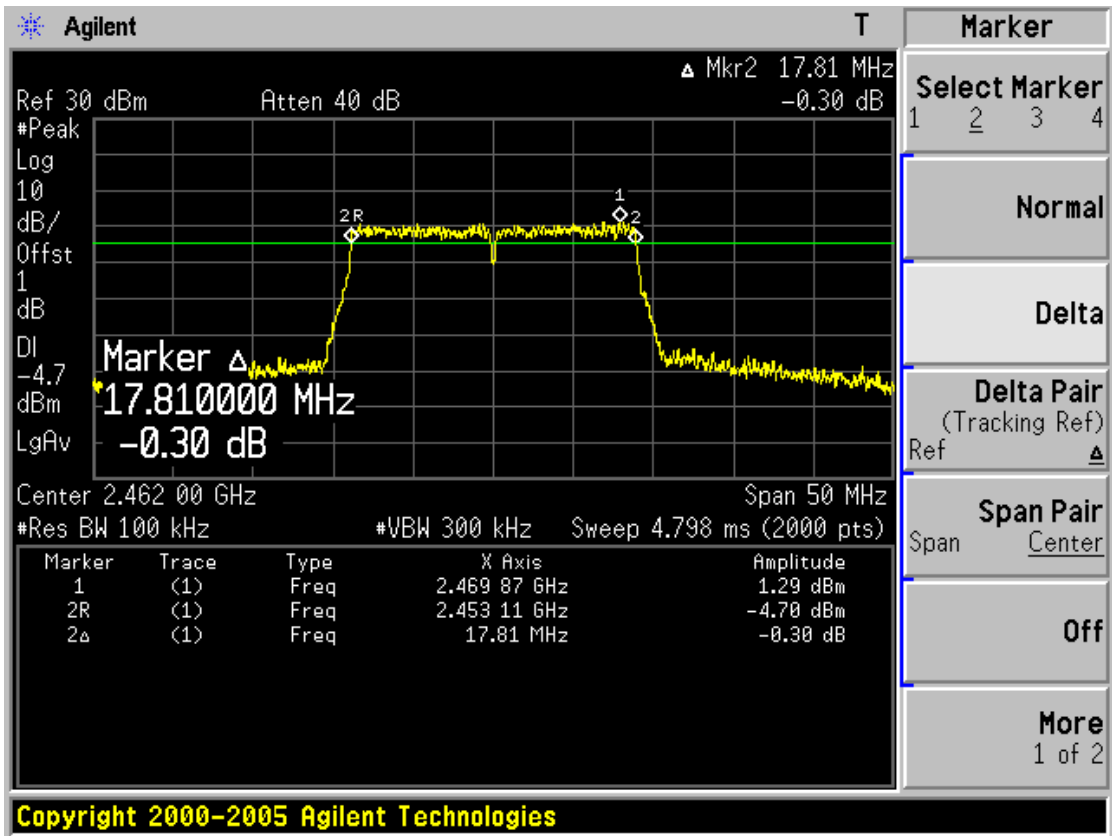
CH1



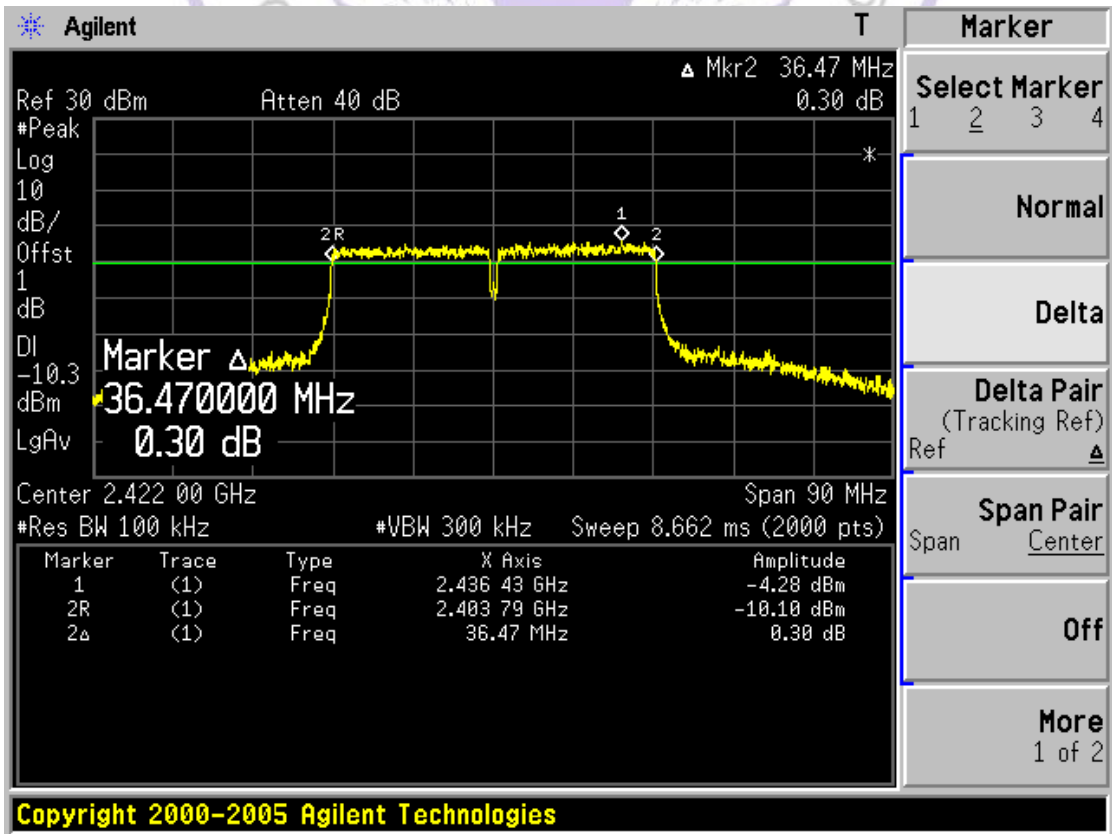
CH6



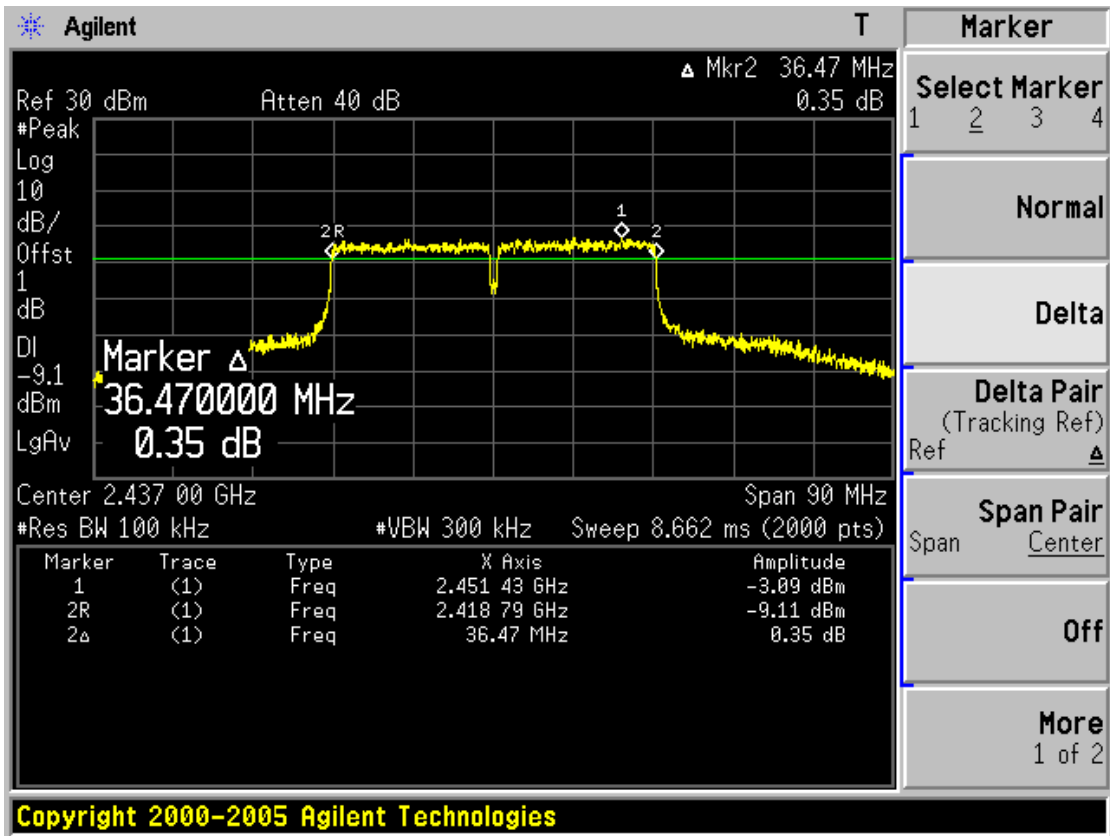
CH11



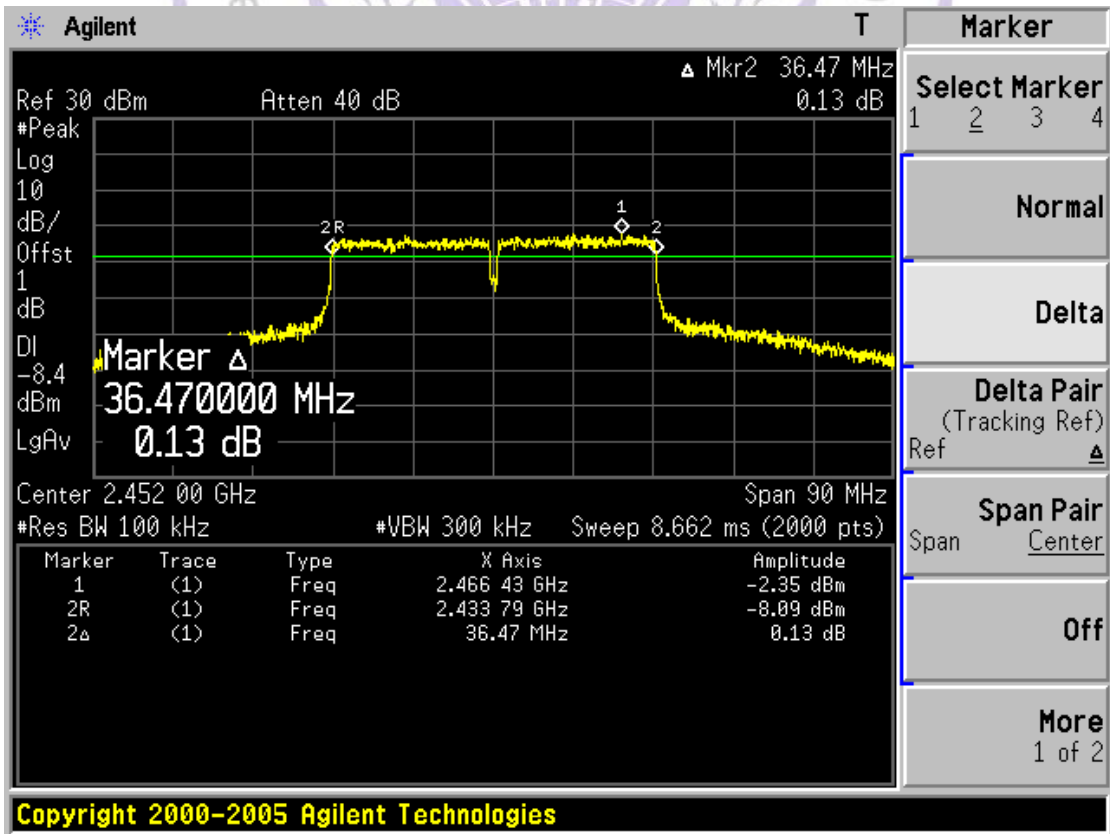
For 802.11n (40MHz) Mode:



CH6

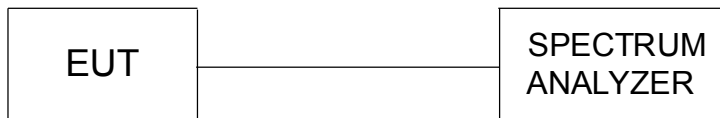


CH9



4.4. Maximum Peak Output Power

TEST CONFIGURATION



TEST PROCEDURE

According to C63.10 -2009 and KDB558074, The EUT was directly connected to the power meter / spectrum analyzer and antenna output port as show in the block diagram as TEST CONFIGURATION shows.

Use the wideband power meter to test peak power and record the result.

LIMIT

The Peak Output Power Measurement limits are 30dBm.

TEST RESULTS

Mode	Channel	Peak Power Output (dBm)	Peak Power Limit (dBm)	PASS / FAIL
802.11b	1	12.71	30	PASS
	6	12.92	30	PASS
	11	12.88	30	PASS
802.11g	1	11.43	30	PASS
	6	11.56	30	PASS
	11	11.22	30	PASS
802.11n HT20	1	11.19	30	PASS
	6	11.28	30	PASS
	11	11.07	30	PASS
802.11n HT40	3	9.28	30	PASS
	6	9.44	30	PASS
	9	9.20	30	PASS

Note: The test results including the cable lose.

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 C63.10 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.

Connect the spectrum analyzer to the EUT using an appropriate RF cable connected to the EUT output. Configure the spectrum analyzer settings as described below (be sure to enter all losses between the unlicensed wireless device output and the spectrum analyzer).

- Span: Set Span for minimum 50 MHz - Reference Level: 110 dB μ V (corrected for gains and losses of test antenna factor, preamp gain and cable loss) - Attenuation: 10 dB
- Sweep Time: Coupled - Resolution Bandwidth: Up to and including 1 GHz = $\geq$ 100 kHz
- Resolution Bandwidth: Above 1 GHz = 1 MHz - Video Bandwidth: Below 1 GHz = 300 kHz
- Video Bandwidth: Up to and including 1 GHz = $\geq$ 3 MHz for peak and 10 Hz for average
- Detector: Peak

Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel.

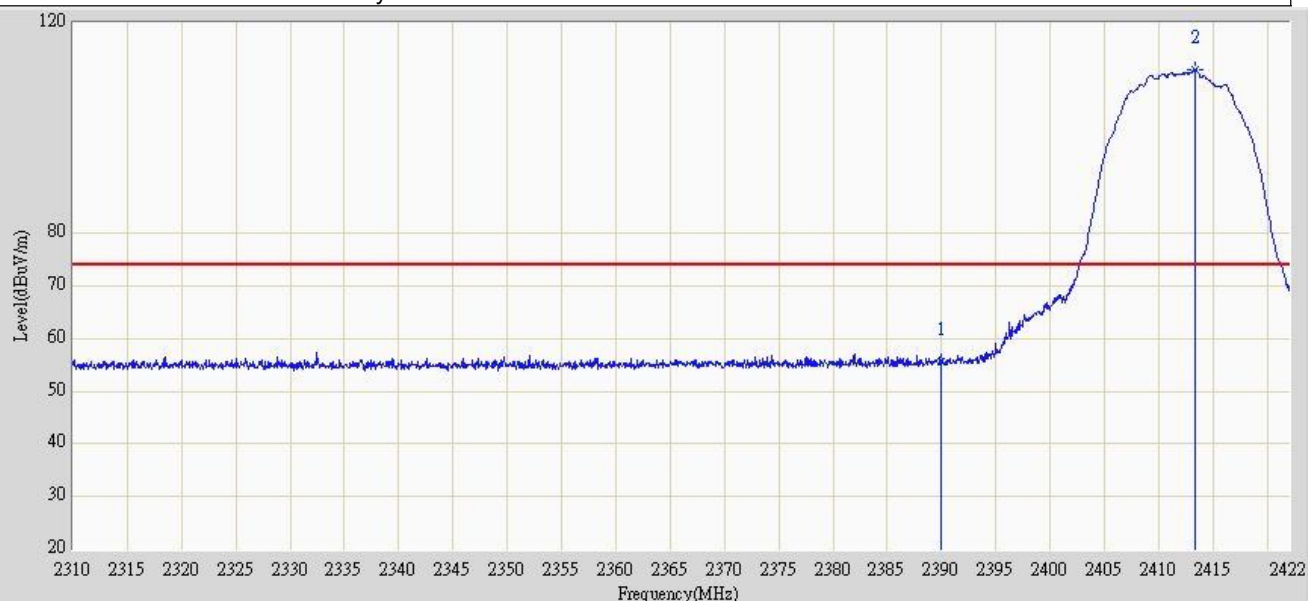
LIMIT

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

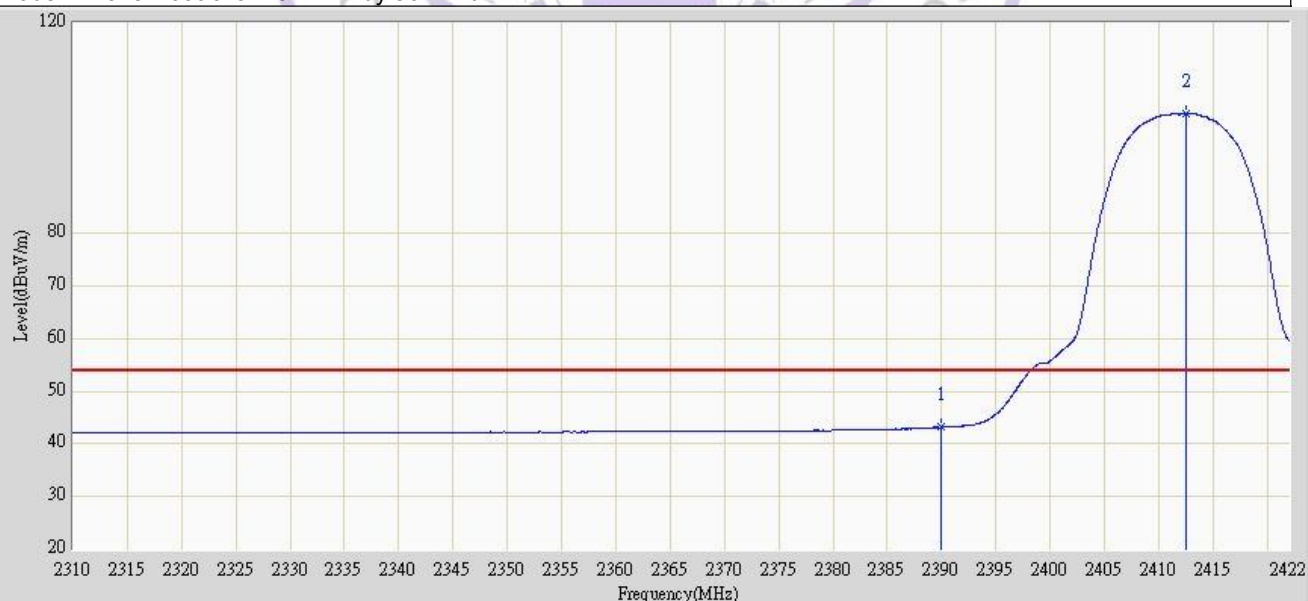
TEST RESULTS

Engineer: Sunny	
Site: AC5	Time: 2012/09/25 - 19:17
Limit: FCC Part15.209_RE(3m)	Margin: 0
Probe: BBHA 9120D_499(1-18GHz)	Polarity: Horizontal
EUT: Tablet PC	Power:By Battery
Note: Mode1: Transmit at channel 2412 by 802.11b	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	55.715	24.627	-18.285	74.000	31.088	PK
2	*	2413.376	111.224	79.981	N/A	N/A	31.243	PK

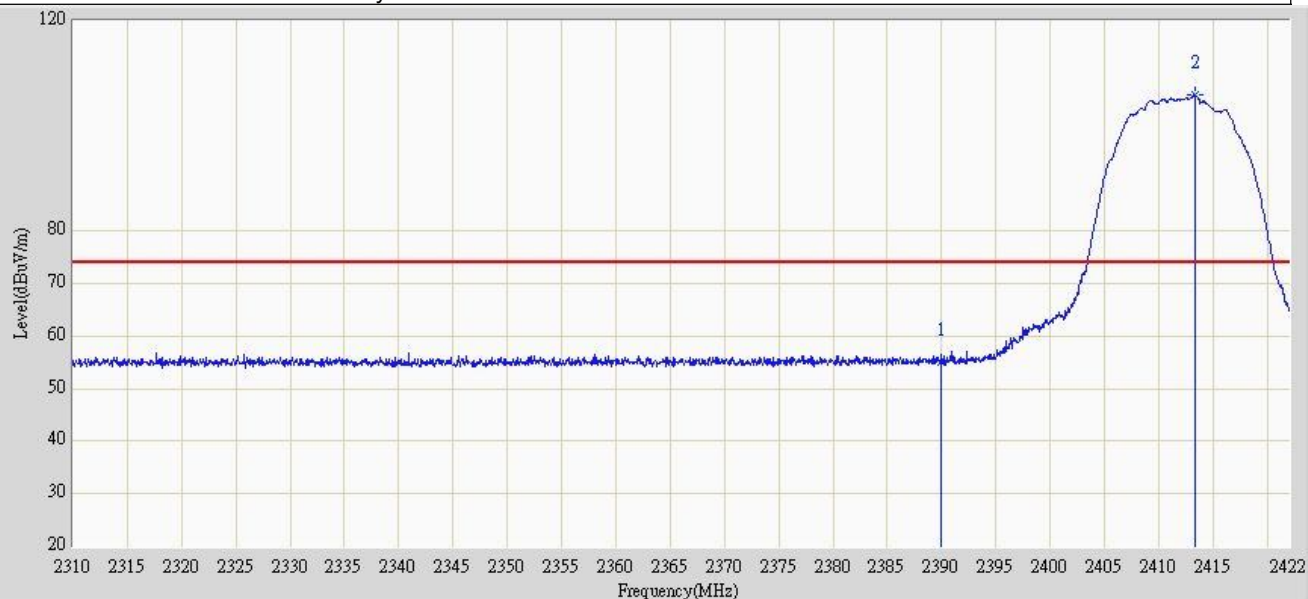
Engineer: Sunny	
Site: AC5	Time: 2012/09/25 - 19:24
Limit: FCC Part15.209_RE(3m)	Margin: 0
Probe: BBHA 9120D_499(1-18GHz)	Polarity: Horizontal
EUT: Tablet PC	Power:By Battery
Note: Mode1: Transmit at channel 2412 by 802.11b	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	43.155	12.067	-10.845	54.000	31.088	AV
2	*	2412.480	102.771	71.536	N/A	N/A	31.235	AV

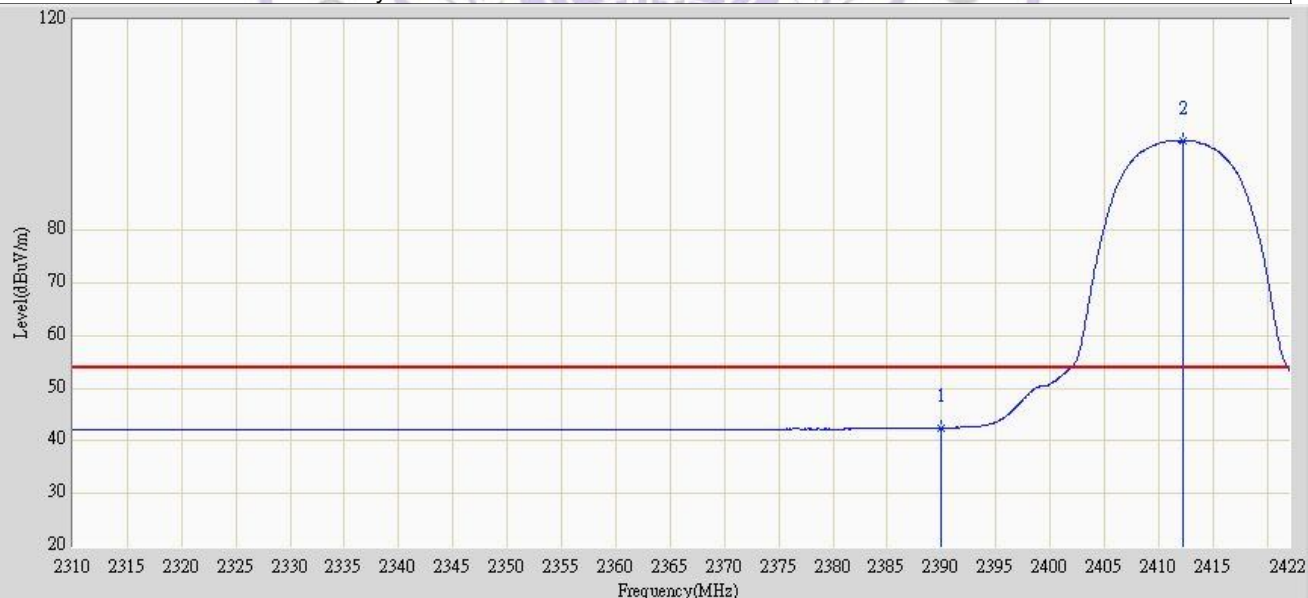
Engineer: Sunny

Site: AC5	Time: 2012/09/25 - 19:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA 9120D_499(1-18GHz)	Polarity: Vertical
EUT: Tablet PC	Power:By Battery
Note: Mode1: Transmit at channel 2412 by 802.11b	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	54.965	23.877	-19.035	74.000	31.088	PK
2	*	2413.376	105.927	74.684	N/A	N/A	31.243	PK

Engineer: Sunny	
Site: AC5	Time: 2012/09/25 - 19:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA 9120D_499(1-18GHz)	Polarity: Vertical
EUT: Tablet PC	Power:By Battery
Note: Mode1: Transmit at channel 2412 by 802.11b	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	42.481	11.393	-11.519	54.000	31.088	AV
2	*	2412.312	96.974	65.741	N/A	N/A	31.233	AV

Engineer: Sunny	
Site: AC5	Time: 2012/09/25 - 19:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0

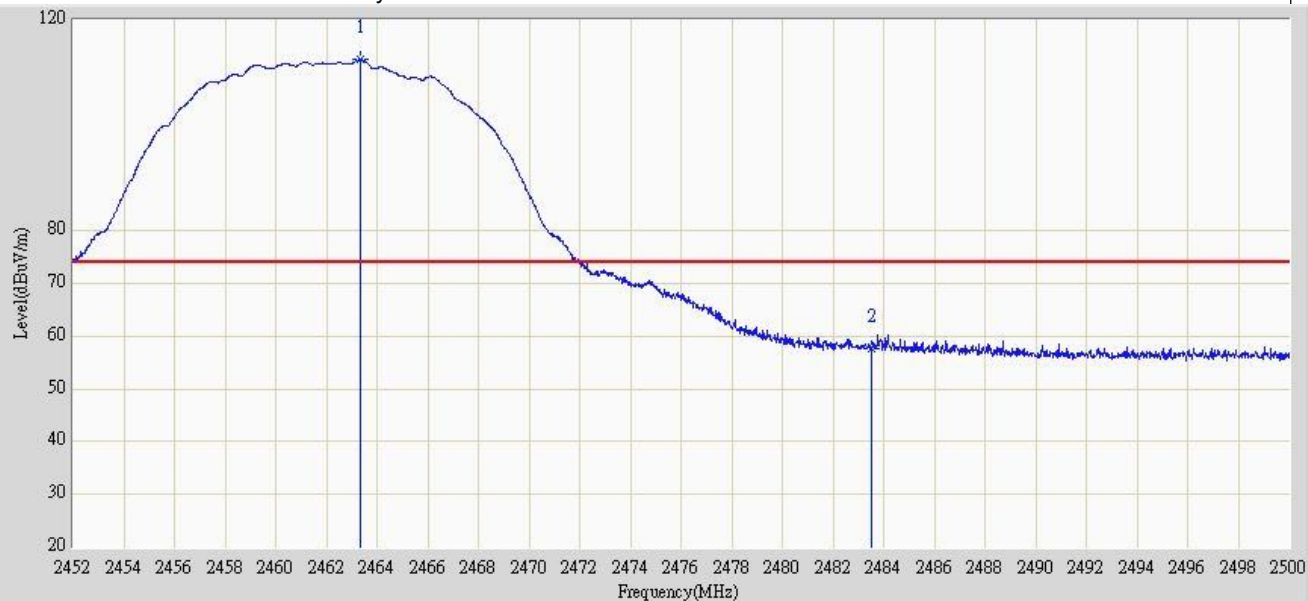
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Horizontal

EUT: Tablet PC

Power: By Battery

Note: Mode1: Transmit at channel 2462 by 802.11b



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2463.328	112.452	80.859	N/A	N/A	31.593	PK
2		2483.500	57.616	26.003	-16.384	74.000	31.613	PK

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 19:49

Limit: FCC_Part15.209_RE(3m)

Margin: 0

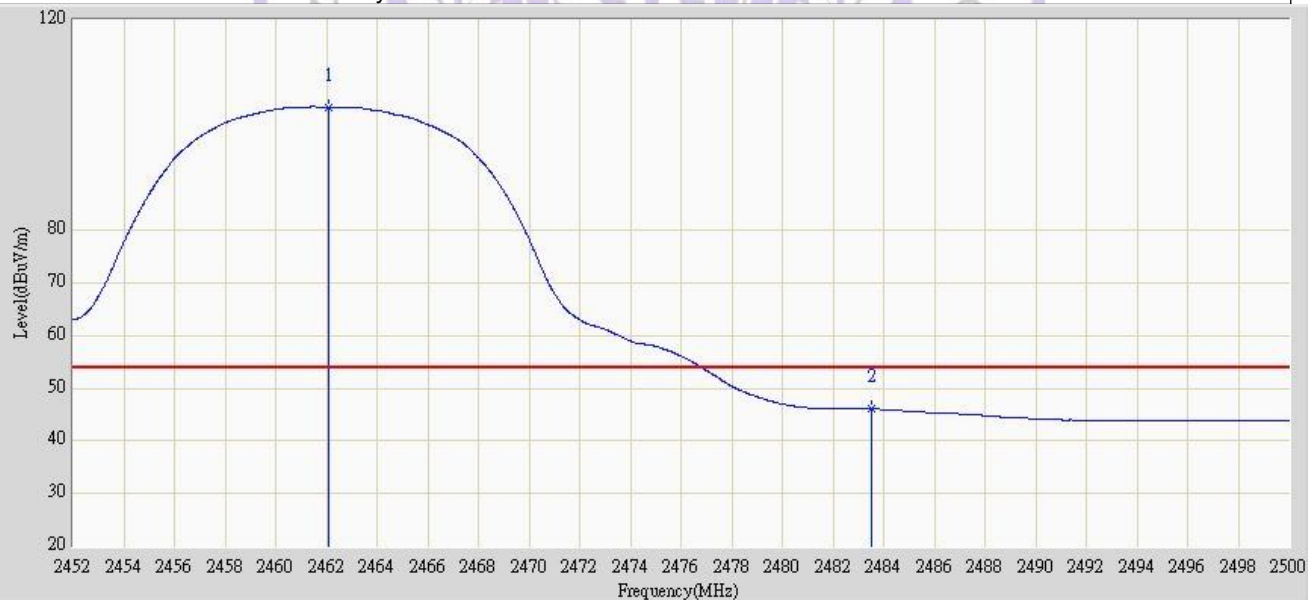
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Horizontal

EUT: Tablet PC

Power: By Battery

Note: Mode1: Transmit at channel 2462 by 802.11b



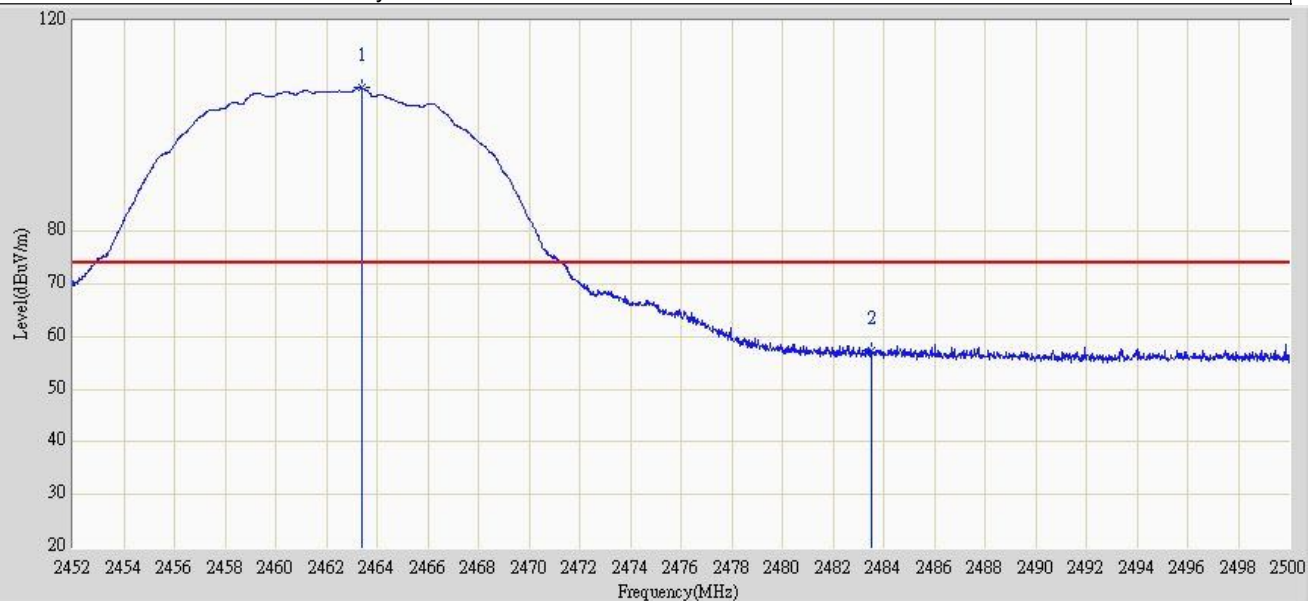
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2462.104	103.389	71.797	N/A	N/A	31.592	AV
2		2483.500	46.117	14.504	-7.883	54.000	31.613	AV

Engineer: Sunny

Site: AC5

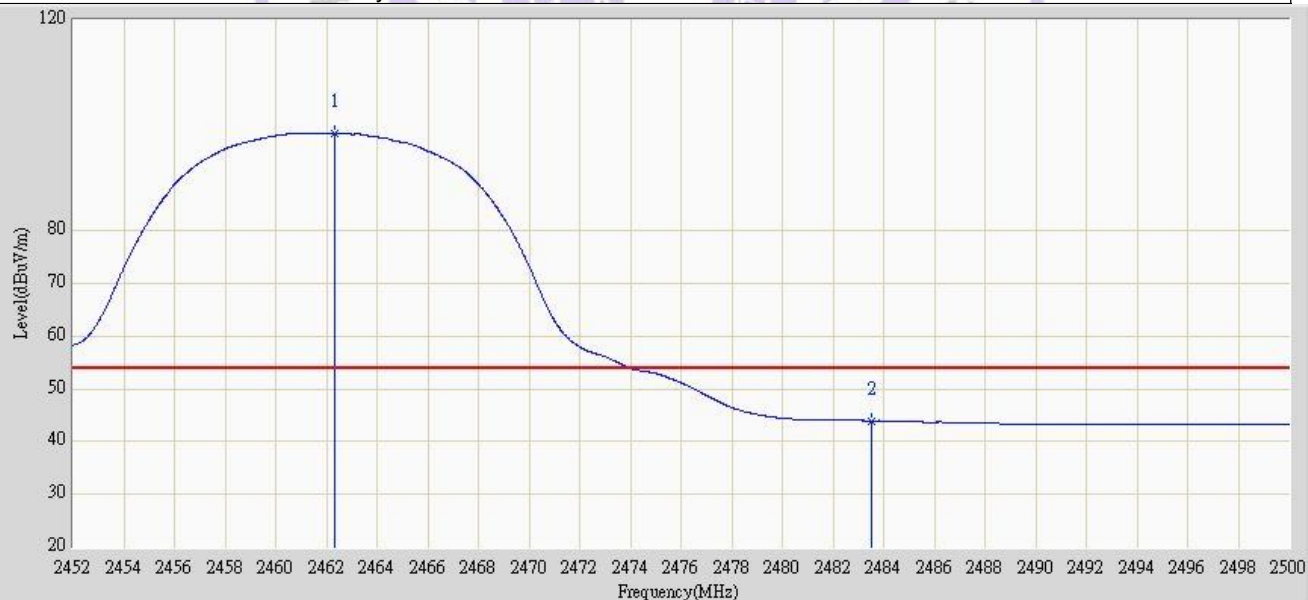
Time: 2012/09/25 - 20:03

Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA 9120D_499(1-18GHz)	Polarity: Vertical
EUT: Tablet PC	Power:By Battery
Note: Mode1: Transmit at channel 2462 by 802.11b	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2463.400	107.253	75.660	N/A	N/A	31.593	PK
2		2483.500	57.348	25.734	-16.652	74.000	31.613	PK

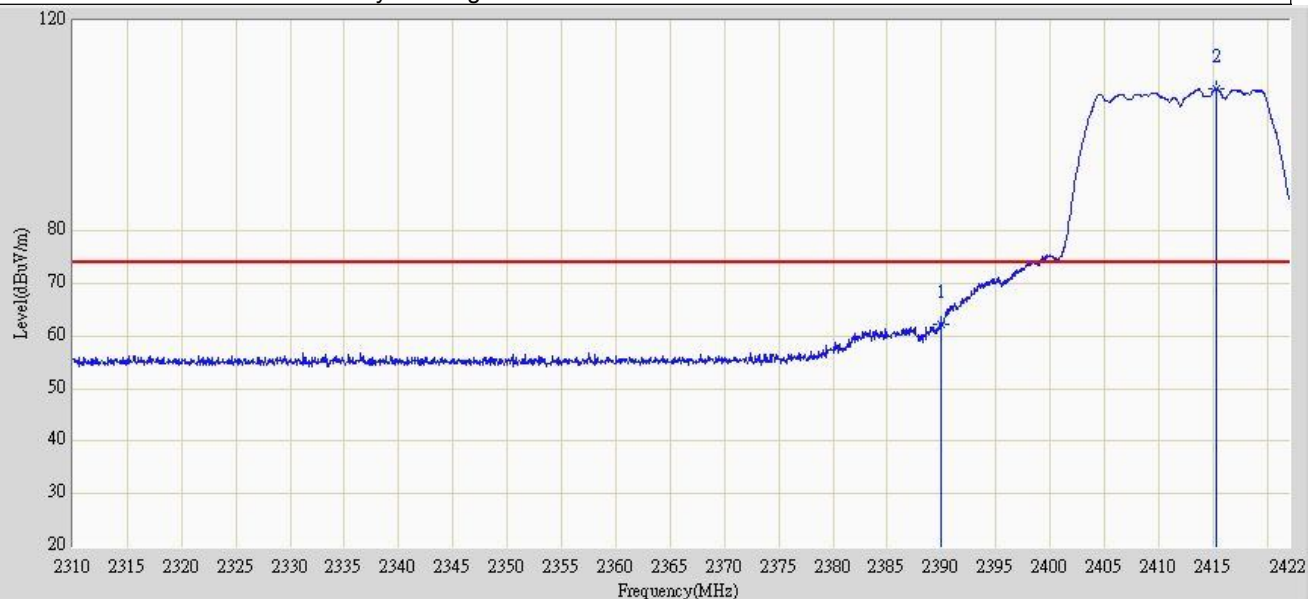
Engineer: Sunny	
Site: AC5	Time: 2012/09/25 - 20:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA 9120D_499(1-18GHz)	Polarity: Vertical
EUT: Tablet PC	Power:By Battery
Note: Mode1: Transmit at channel 2462 by 802.11b	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2462.344	98.479	66.887	N/A	N/A	31.592	AV
2		2483.500	43.931	12.318	-10.069	54.000	31.613	AV

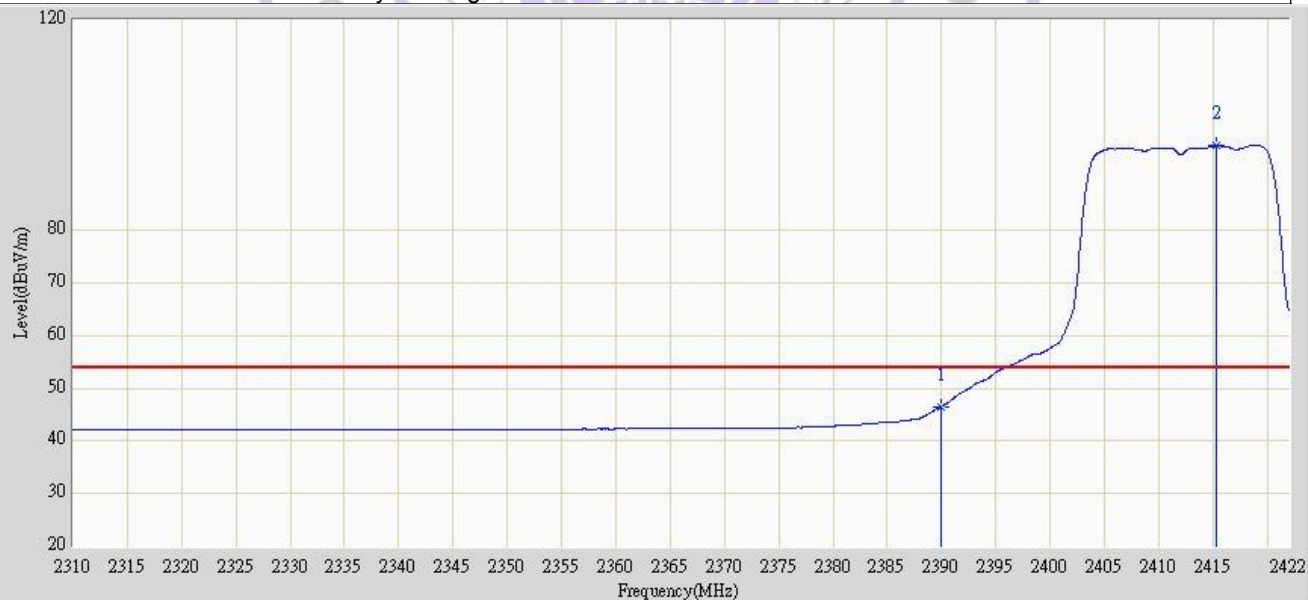
Engineer: Sunny

Site: AC5	Time: 2012/09/25 - 20:09
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA 9120D_499(1-18GHz)	Polarity: Horizontal
EUT: Tablet PC	Power:By Battery
Note: Mode2: Transmit at channel 2412 by 802.11g	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	62.162	31.074	-11.838	74.000	31.088	PK
2	*	2415.280	107.157	75.897	N/A	N/A	31.260	PK

Engineer: Sunny	Time: 2012/09/25 - 20:14
Site: AC5	Margin: 0
Limit: FCC_Part15.209_RE(3m)	Polarity: Horizontal
Probe: BBHA 9120D_499(1-18GHz)	Power:By Battery
EUT: Tablet PC	
Note: Mode2: Transmit at channel 2412 by 802.11g	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	46.546	15.458	-7.454	54.000	31.088	AV
2	*	2415.280	96.112	64.852	N/A	N/A	31.260	AV

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 20:21

Limit: FCC_Part15.209_RE(3m)

Margin: 0

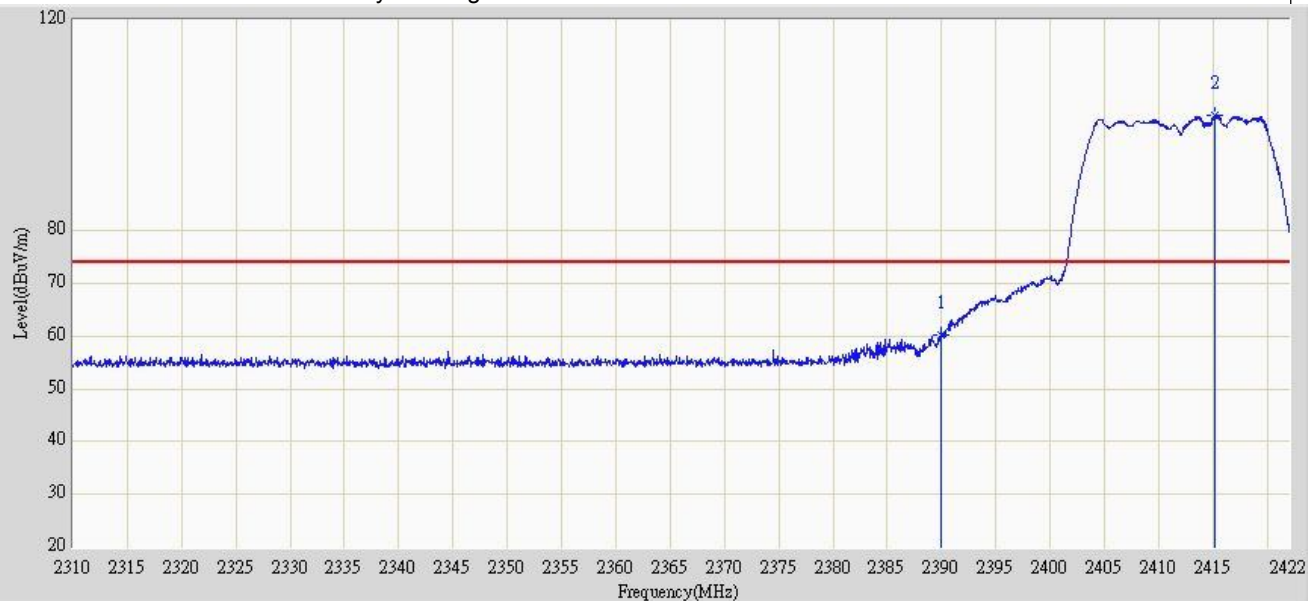
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Vertical

EUT: Tablet PC

Power:By Battery

Note: Mode2: Transmit at channel 2412 by 802.11g



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	60.170	29.082	-13.830	74.000	31.088	PK
2	*	2415.224	101.841	70.581	N/A	N/A	31.260	PK

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 20:23

Limit: FCC_Part15.209_RE(3m)

Margin: 0

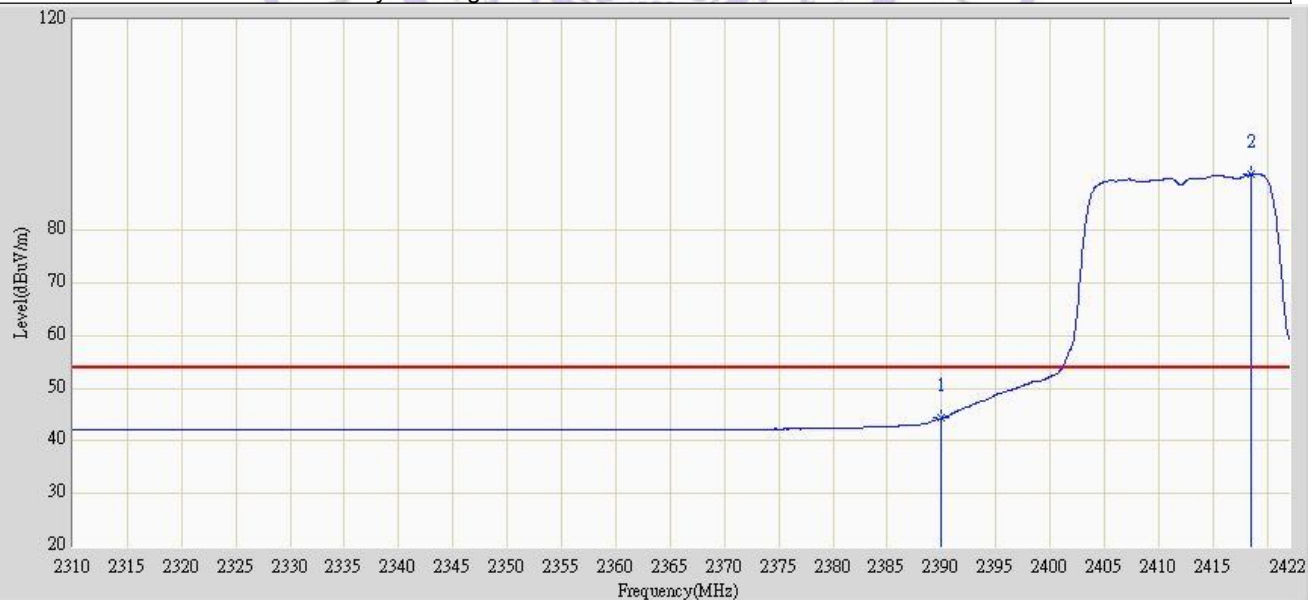
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Vertical

EUT: Tablet PC

Power:By Battery

Note: Mode2: Transmit at channel 2412 by 802.11g



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	44.357	13.269	-9.643	54.000	31.088	AV
2	*	2418.584	90.671	59.380	N/A	N/A	31.291	AV

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 20:25

Limit: FCC_Part15.209_RE(3m)

Margin: 0

Probe: BBHA 9120D_499(1-18GHz)

Polarity: Horizontal

EUT: Tablet PC

Power:By Battery

Note: Mode2: Transmit at channel 2462 by 802.11g



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2463.544	108.093	76.499	N/A	N/A	31.594	PK
2		2483.500	72.019	40.405	-1.981	74.000	31.613	PK

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 20:30

Limit: FCC_Part15.209_RE(3m)

Margin: 0

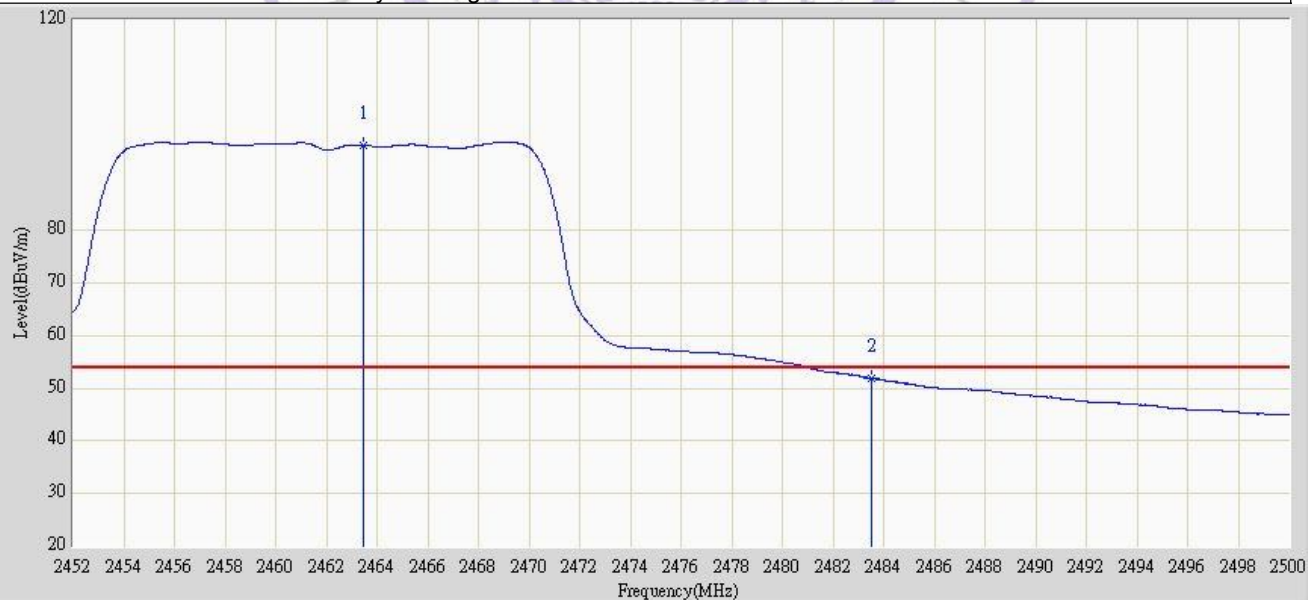
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Horizontal

EUT: Tablet PC

Power:By Battery

Note: Mode2: Transmit at channel 2462 by 802.11g



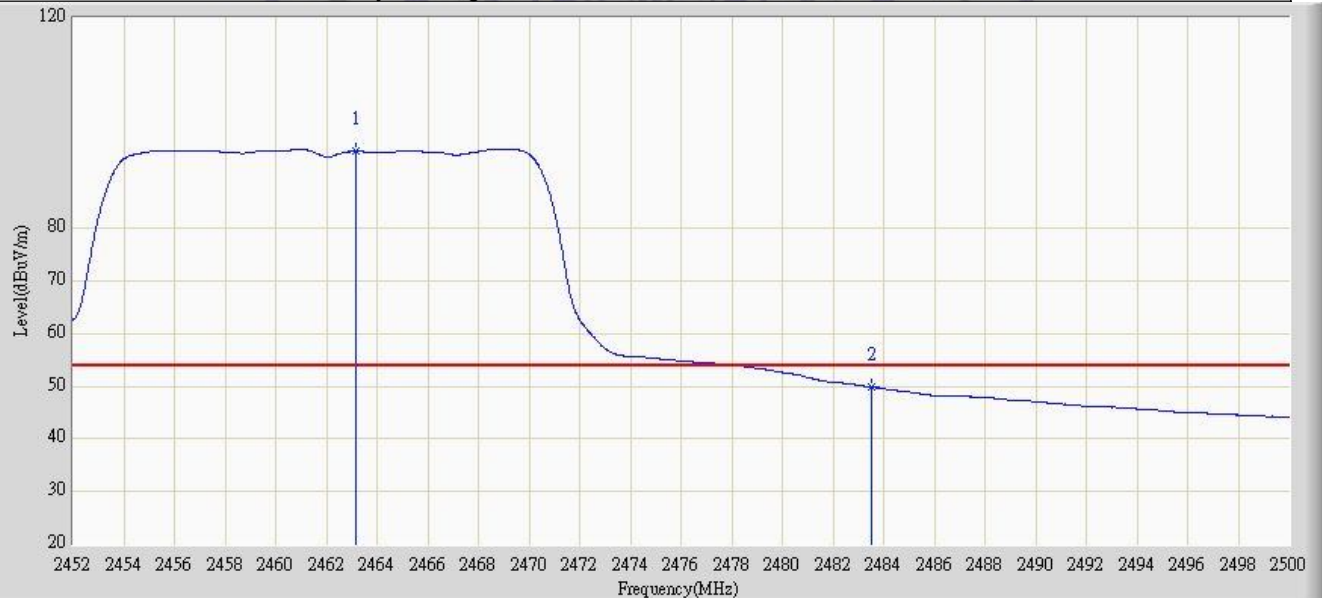
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2463.472	96.153	64.560	N/A	N/A	31.594	AV
2		2483.500	51.905	20.292	-2.095	54.000	31.613	AV

Engineer: Sunny	
Site: AC5	Time: 2012/09/25 - 20:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA 9120D_499(1-18GHz)	Polarity: Horizontal
EUT: Tablet PC	Power:By Battery
Note: Mode2: Transmit at channel 2462 by 802.11g	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2463.472	105.908	74.315	N/A	N/A	31.594	PK
2		2483.500	70.881	39.267	-3.119	74.000	31.613	PK

Engineer: Sunny	
Site: AC5	Time: 2012/09/25 - 20:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA 9120D_499(1-18GHz)	Polarity: Horizontal
EUT: Tablet PC	Power:By Battery
Note: Mode2: Transmit at channel 2462 by 802.11g	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2463.160	94.574	62.981	N/A	N/A	31.593	AV
2		2483.500	49.892	18.279	-4.108	54.000	31.613	AV

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 20:41

Limit: FCC_Part15.209_RE(3m)

Margin: 0

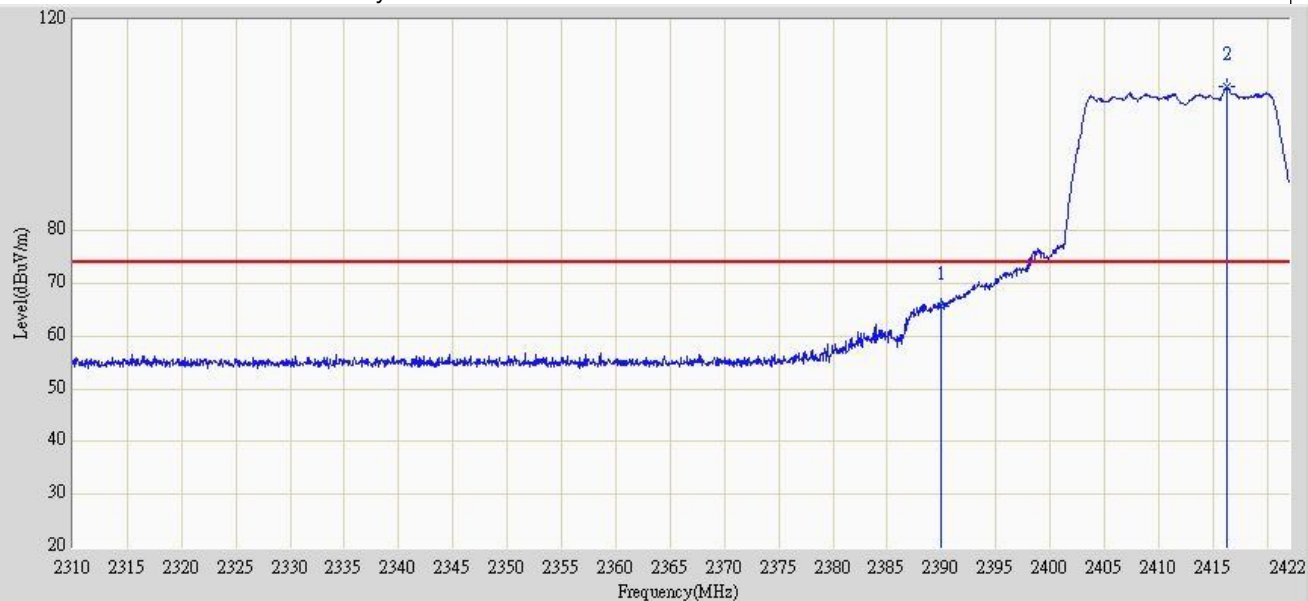
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Horizontal

EUT: Tablet PC

Power:By Battery

Note: Mode3: Transmit at channel 2412 by 802.11n20



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	65.819	34.731	-8.181	74.000	31.088	PK
2	*	2416.344	107.247	75.977	N/A	N/A	31.270	PK

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 20:47

Limit: FCC_Part15.209_RE(3m)

Margin: 0

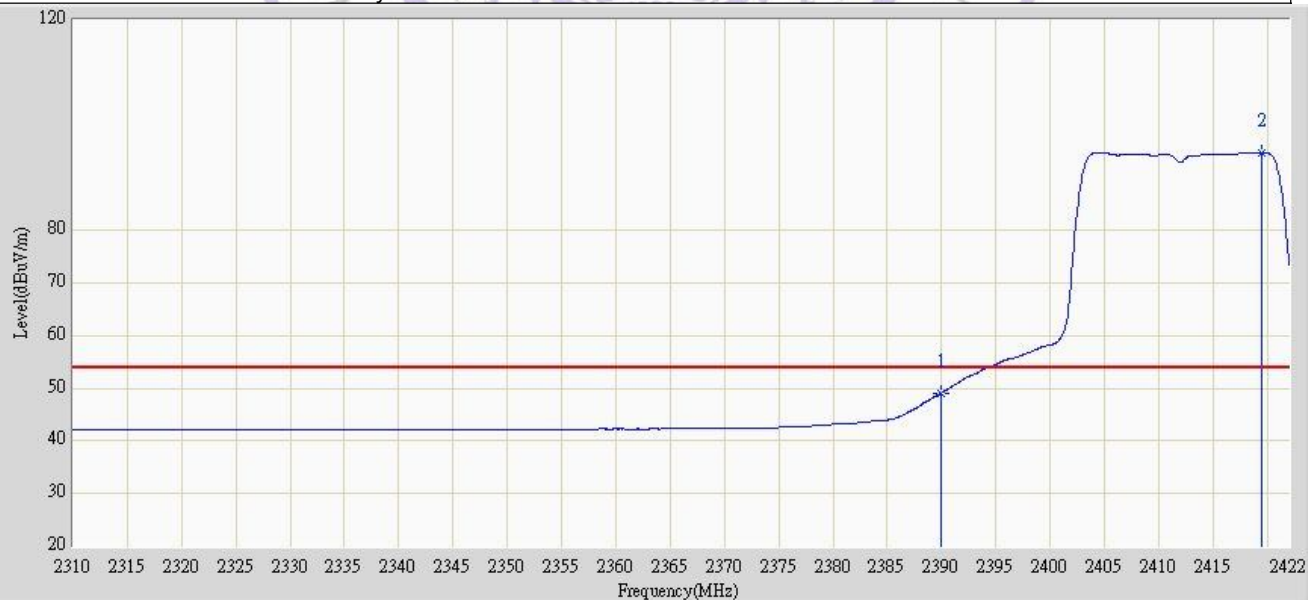
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Horizontal

EUT: Tablet PC

Power:By Battery

Note: Mode3: Transmit at channel 2412 by 802.11n20



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	49.126	18.038	-4.874	54.000	31.088	AV
2	*	2419.480	94.714	63.415	N/A	N/A	31.299	AV

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 20:49

Limit: FCC_Part15.209_RE(3m)

Margin: 0

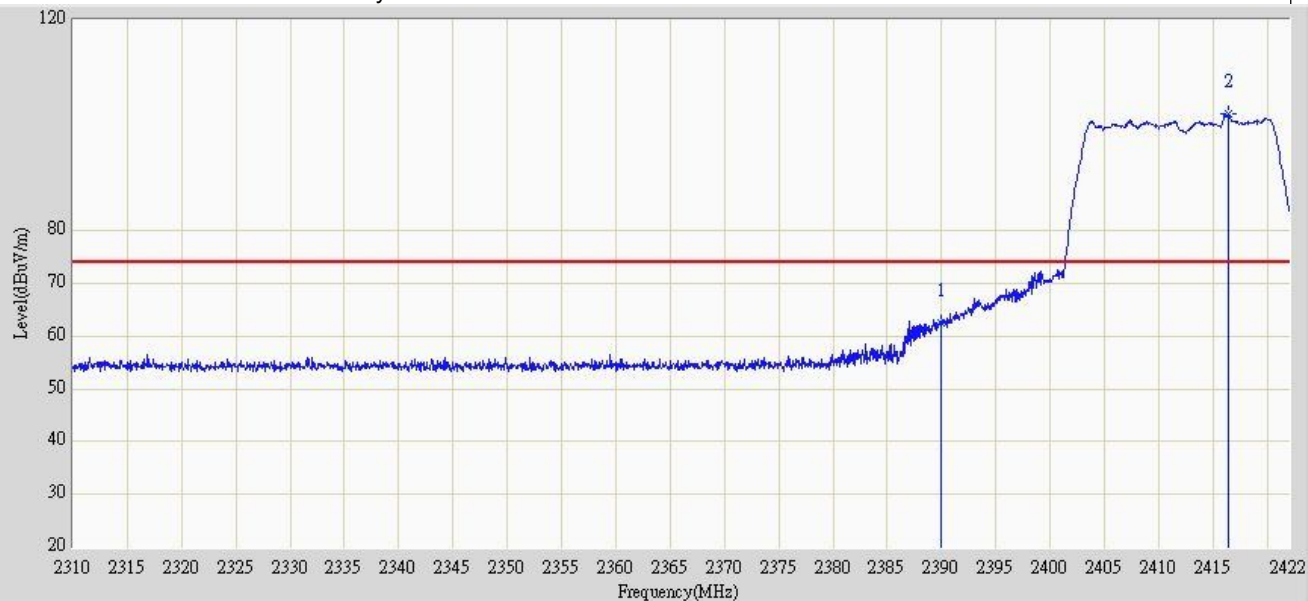
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Vertical

EUT: Tablet PC

Power:By Battery

Note: Mode3: Transmit at channel 2412 by 802.11n20



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	62.406	31.318	-11.594	74.000	31.088	PK
2	*	2416.400	102.170	70.899	N/A	N/A	31.270	PK

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 20:51

Limit: FCC_Part15.209_RE(3m)

Margin: 0

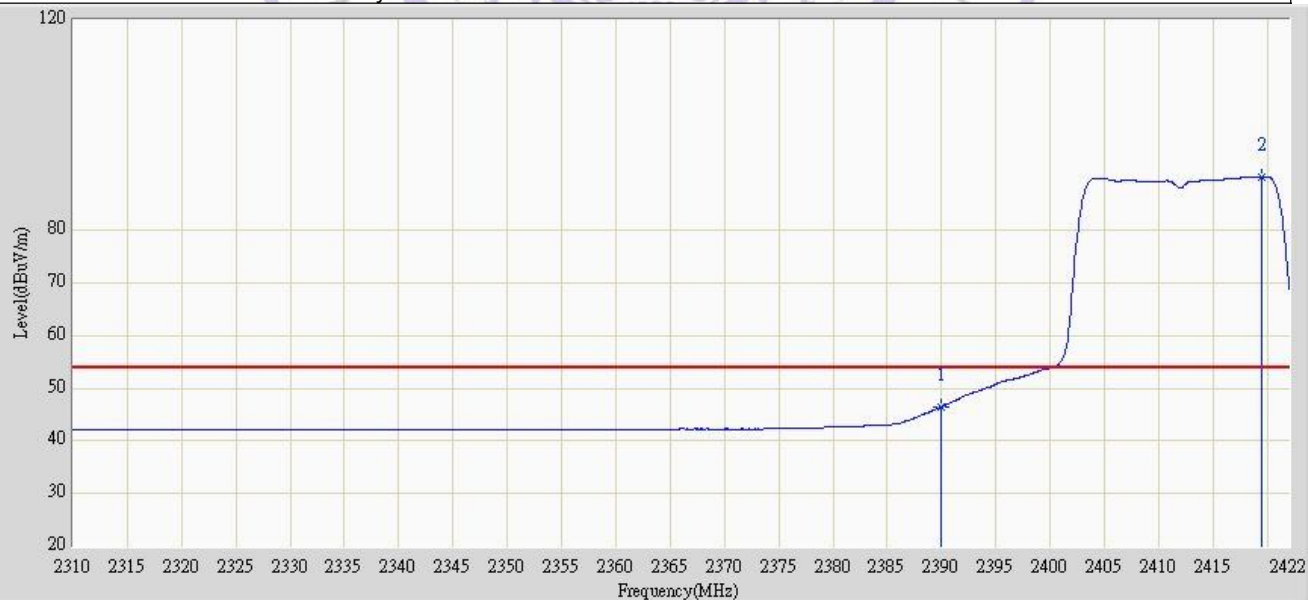
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Vertical

EUT: Tablet PC

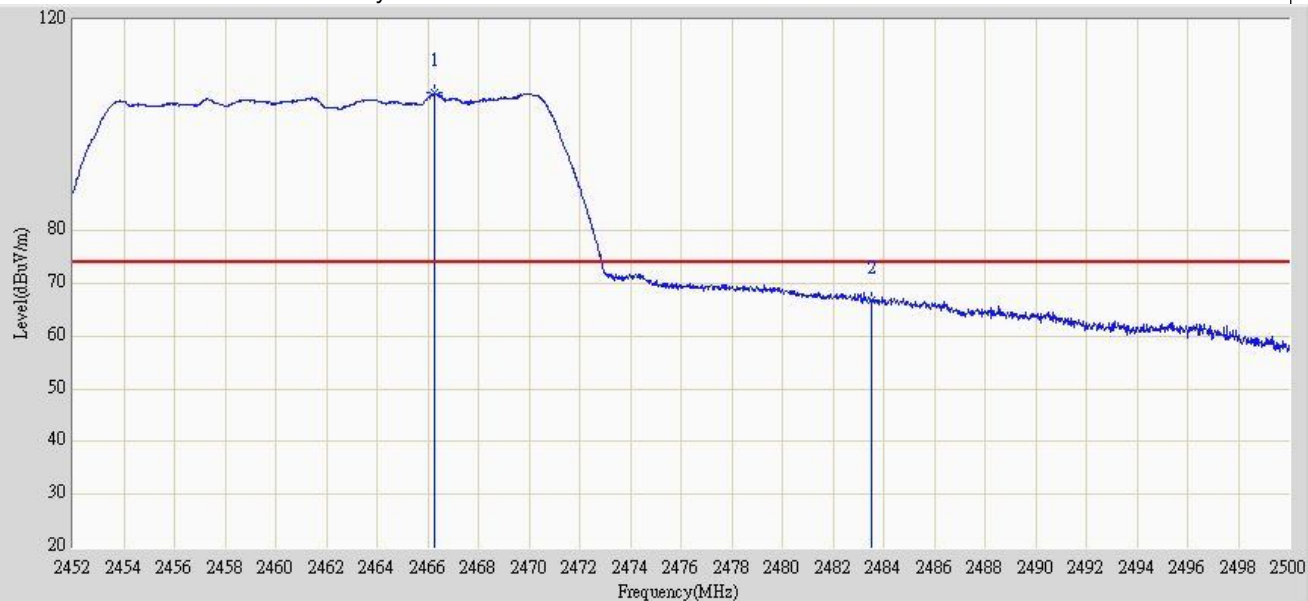
Power:By Battery

Note: Mode3: Transmit at channel 2412 by 802.11n20



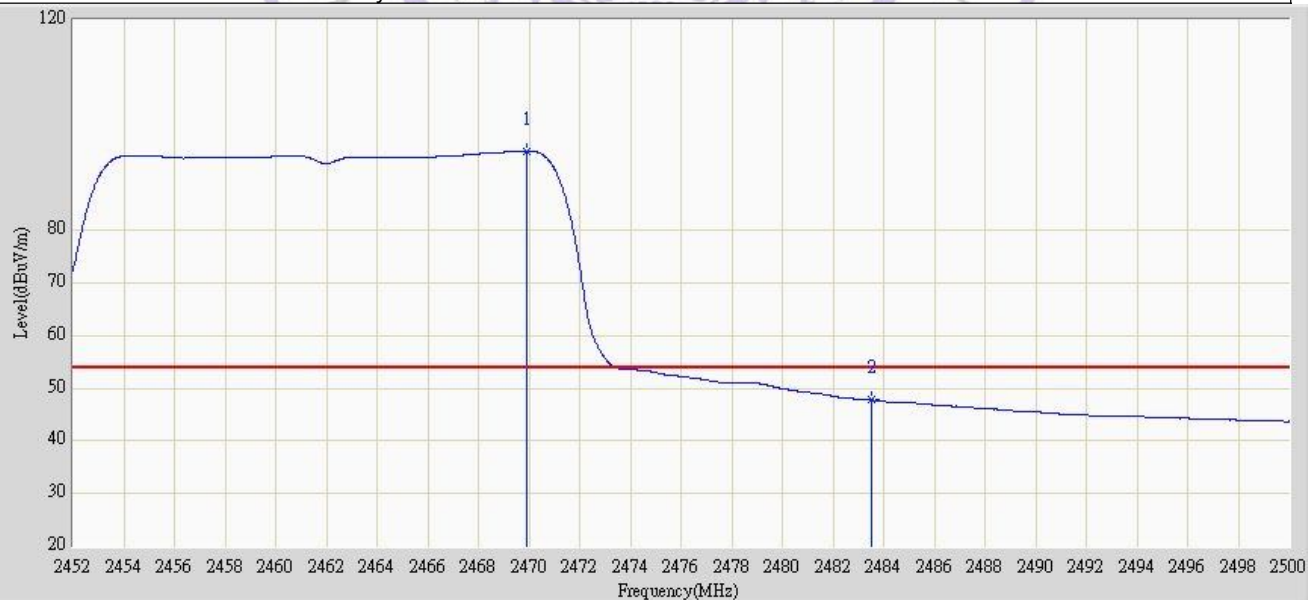
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	46.428	15.340	-7.572	54.000	31.088	AV
2	*	2419.480	90.181	58.882	N/A	N/A	31.299	AV

Engineer: Sunny	
Site: AC5	Time: 2012/09/25 - 21:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA 9120D_499(1-18GHz)	Polarity: Horizontal
EUT: Tablet PC	Power:By Battery
Note: Mode3: Transmit at channel 2462 by 802.11n20	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2466.280	106.112	74.516	N/A	N/A	31.596	PK
2		2483.500	66.955	35.341	-7.045	74.000	31.613	PK

Engineer: Sunny	
Site: AC5	Time: 2012/09/25 - 21:09
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA 9120D_499(1-18GHz)	Polarity: Horizontal
EUT: Tablet PC	Power:By Battery
Note: Mode3: Transmit at channel 2462 by 802.11n20	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2469.928	95.025	63.425	N/A	N/A	31.600	AV
2		2483.500	47.794	16.180	-6.206	54.000	31.613	AV

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 21:11

Limit: FCC_Part15.209_RE(3m)

Margin: 0

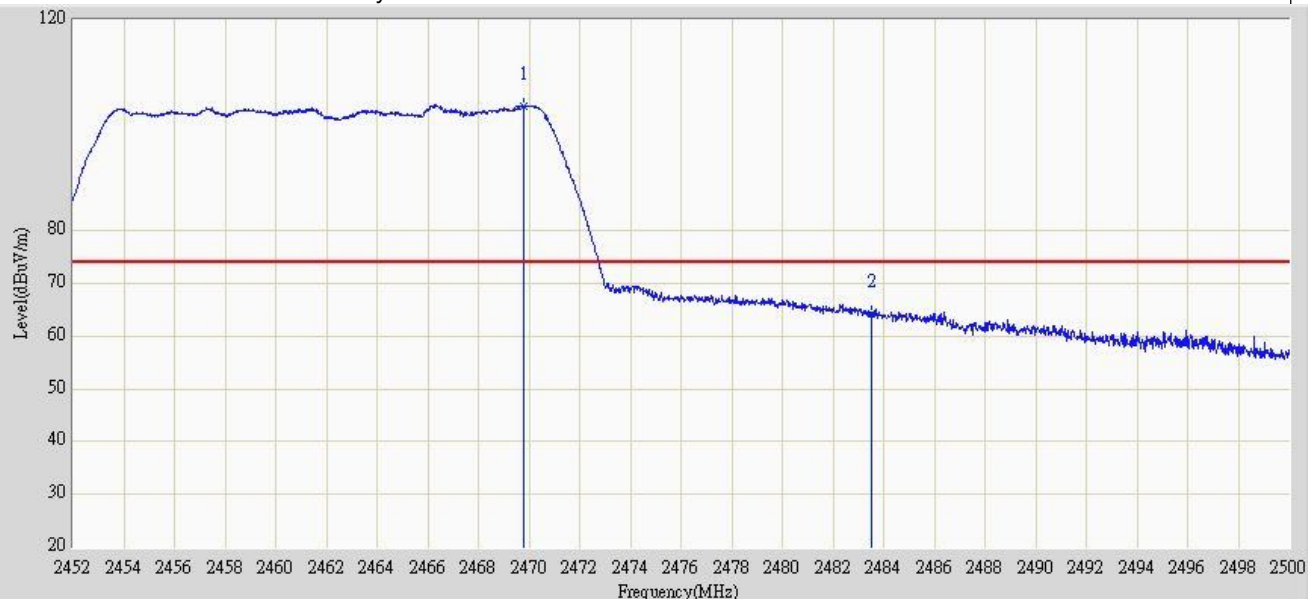
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Vertical

EUT: Tablet PC

Power:By Battery

Note: Mode3: Transmit at channel 2462 by 802.11n20



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2469.784	103.755	72.155	N/A	N/A	31.599	PK
2		2483.500	64.184	32.570	-9.816	74.000	31.613	PK

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 21:13

Limit: FCC_Part15.209_RE(3m)

Margin: 0

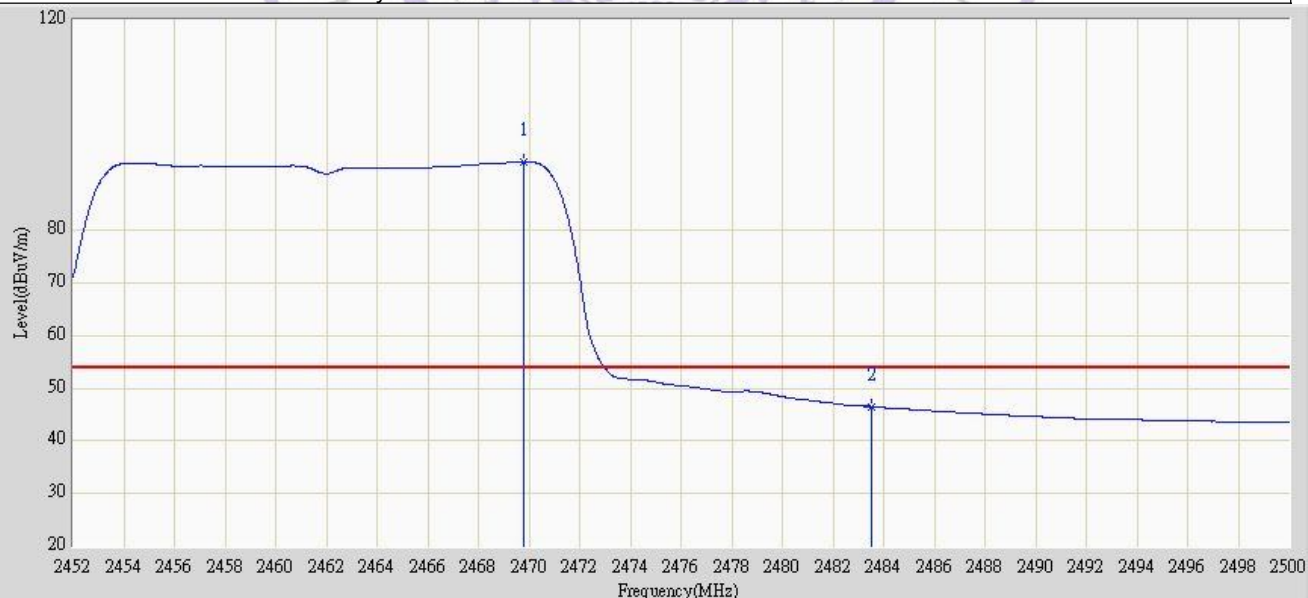
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Vertical

EUT: Tablet PC

Power:By Battery

Note: Mode3: Transmit at channel 2462 by 802.11n20



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2469.784	92.938	61.338	N/A	N/A	31.599	AV
2		2483.500	46.544	14.931	-7.456	54.000	31.613	AV

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 21:15

Limit: FCC_Part15.209_RE(3m)

Margin: 0

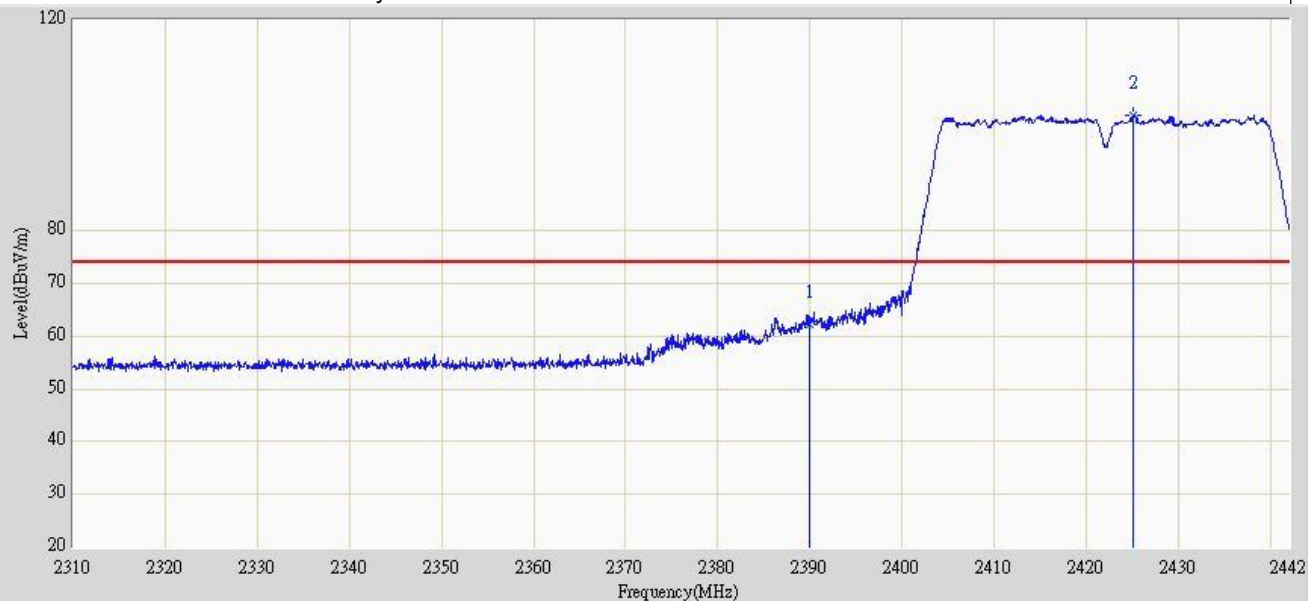
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Horizontal

EUT: Tablet PC

Power:By Battery

Note: Mode4: Transmit at channel 2422 by 802.11n40



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	62.336	31.248	-11.664	74.000	31.088	PK
2	*	2425.170	101.977	70.626	N/A	N/A	31.351	PK

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 21:18

Limit: FCC_Part15.209_RE(3m)

Margin: 0

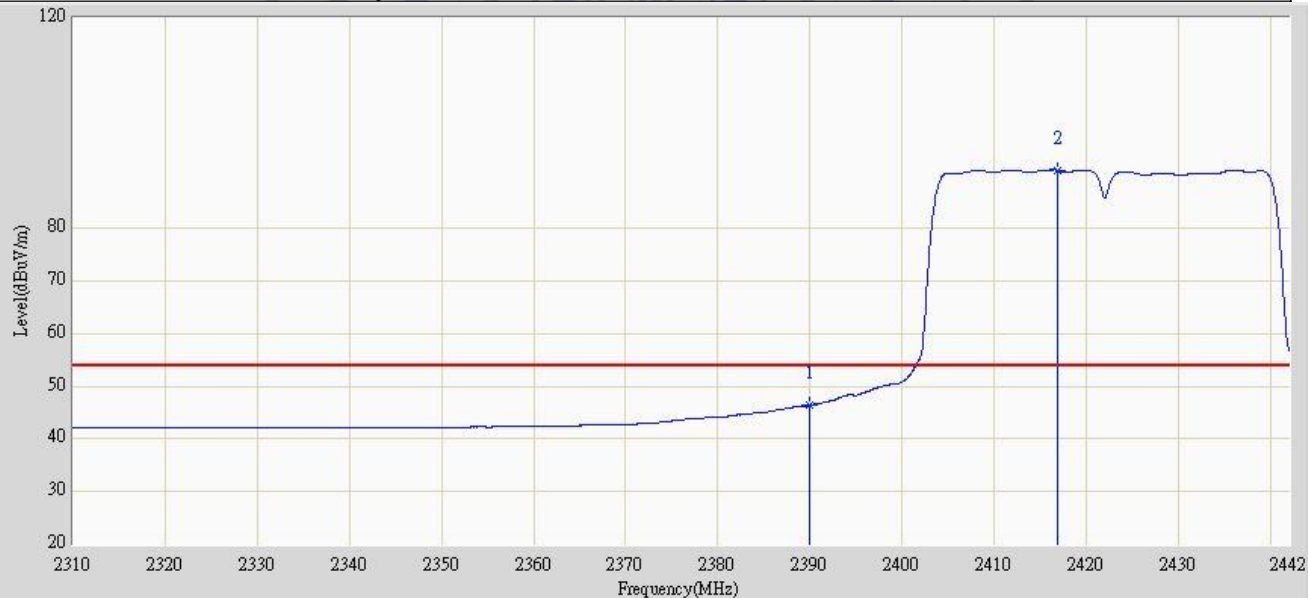
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Horizontal

EUT: Tablet PC

Power:By Battery

Note: Mode4: Transmit at channel 2422 by 802.11n40



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	46.439	15.351	-7.561	54.000	31.088	AV
2	*	2416.920	91.019	59.744	N/A	N/A	31.275	AV

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 21:20

Limit: FCC_Part15.209_RE(3m)

Margin: 0

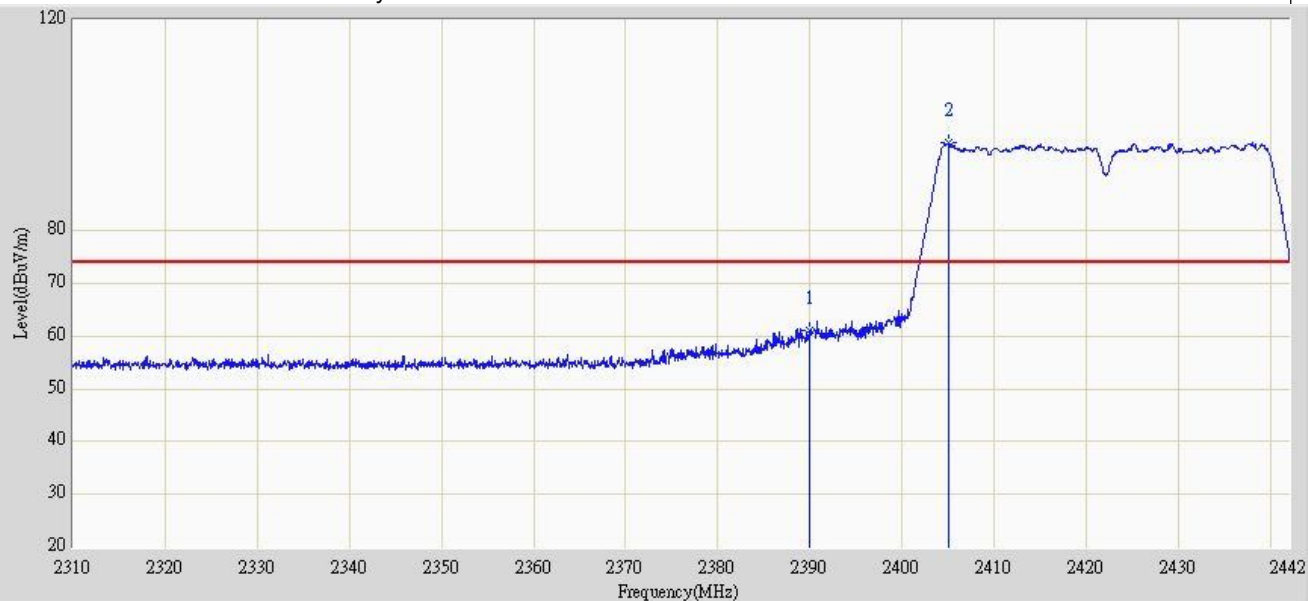
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Vertical

EUT: Tablet PC

Power:By Battery

Note: Mode4: Transmit at channel 2422 by 802.11n40



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	61.093	30.005	-12.907	74.000	31.088	PK
2	*	2405.040	96.637	65.458	N/A	N/A	31.179	PK

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 21:23

Limit: FCC_Part15.209_RE(3m)

Margin: 0

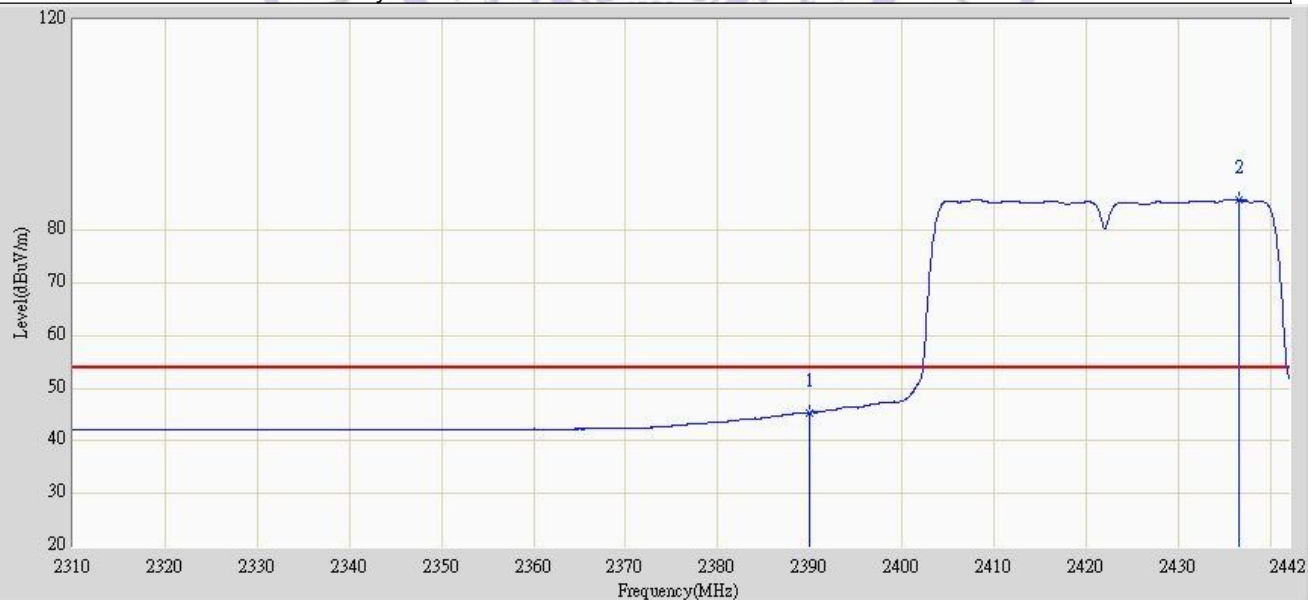
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Vertical

EUT: Tablet PC

Power:By Battery

Note: Mode4: Transmit at channel 2422 by 802.11n40



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	45.353	14.265	-8.647	54.000	31.088	AV
2	*	2436.588	85.772	54.316	N/A	N/A	31.456	AV

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 21:27

Limit: FCC_Part15.209_RE(3m)

Margin: 0

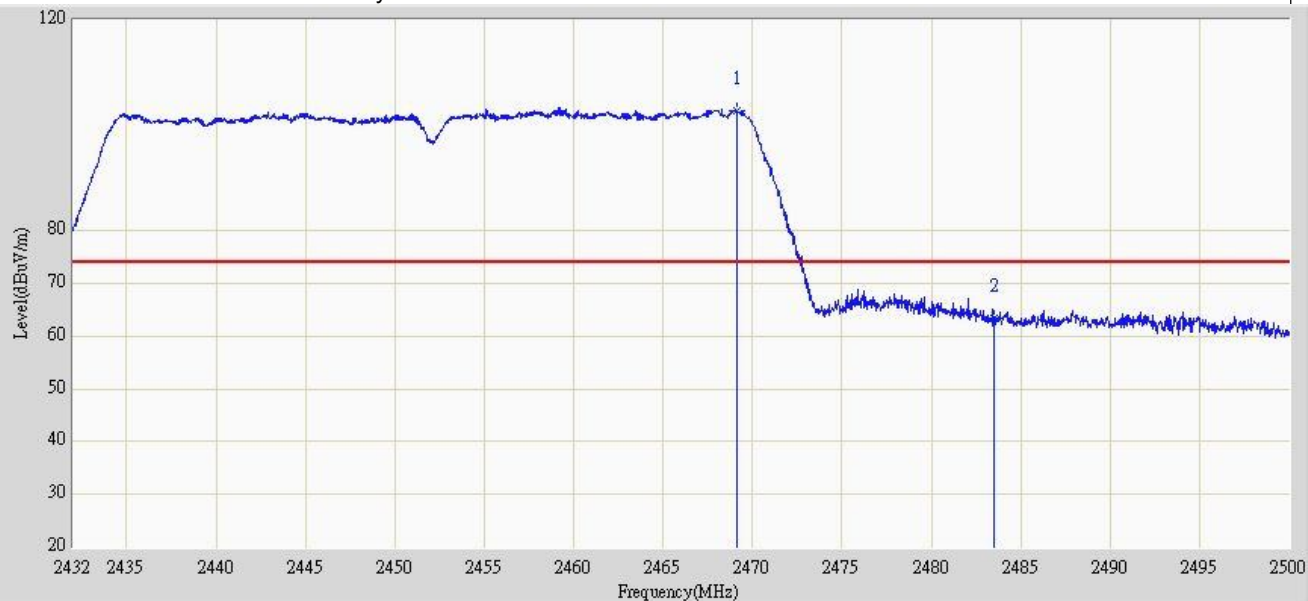
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Horizontal

EUT: Tablet PC

Power:By Battery

Note: Mode4: Transmit at channel 2452 by 802.11n40



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2469.094	102.793	71.194	N/A	N/A	31.599	PK
2		2483.500	63.449	31.835	-10.551	74.000	31.613	PK

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 21:30

Limit: FCC_Part15.209_RE(3m)

Margin: 0

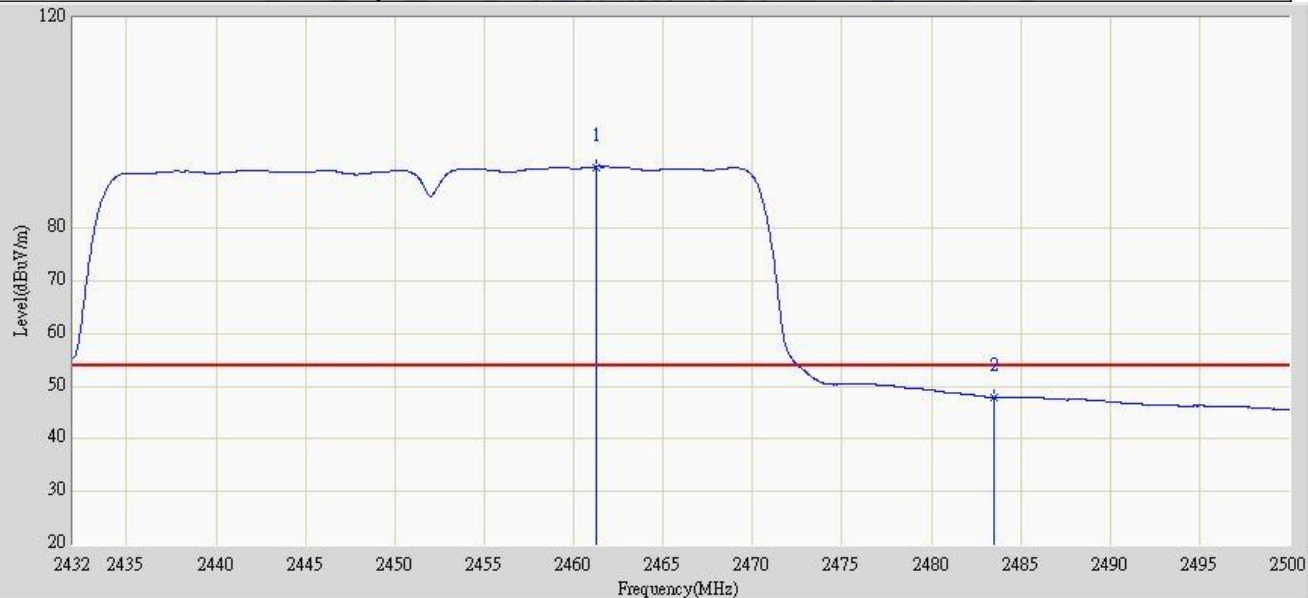
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Horizontal

EUT: Tablet PC

Power:By Battery

Note: Mode4: Transmit at channel 2452 by 802.11n40



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.240	91.688	60.099	N/A	N/A	31.589	AV
2		2483.500	47.901	16.287	-6.099	54.000	31.613	AV

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 21:33

Limit: FCC_Part15.209_RE(3m)

Margin: 0

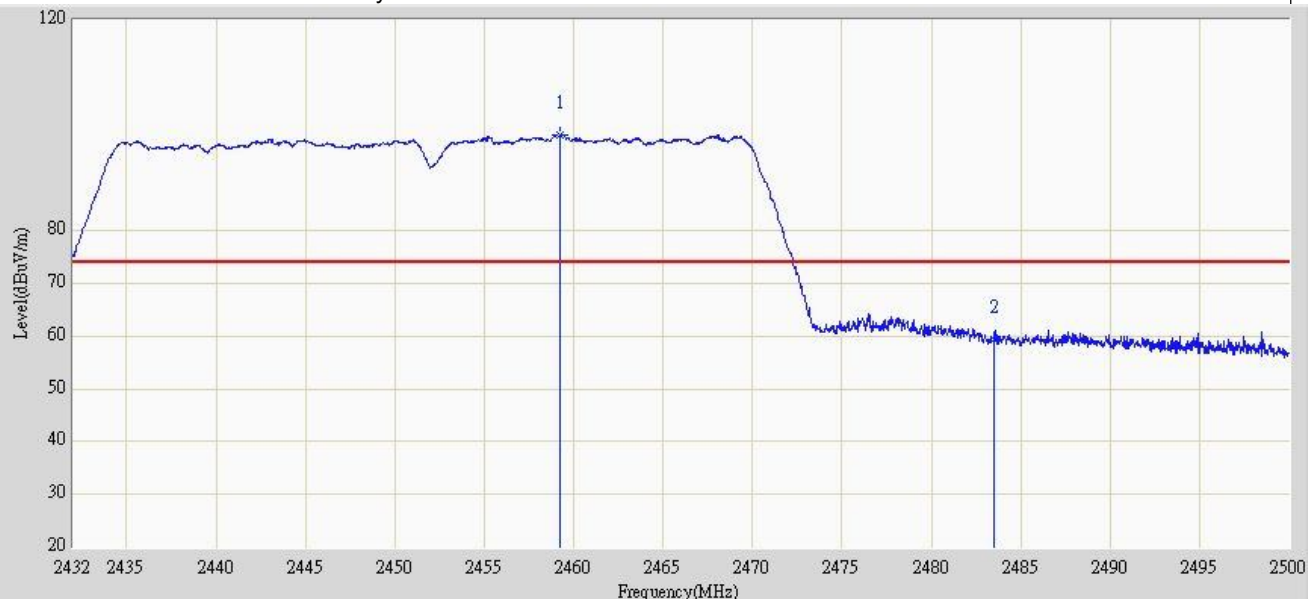
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Vertical

EUT: Tablet PC

Power:By Battery

Note: Mode4: Transmit at channel 2452 by 802.11n40



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2459.234	98.272	66.689	N/A	N/A	31.582	PK
2		2483.500	59.431	27.817	-14.569	74.000	31.613	PK

Engineer: Sunny

Site: AC5

Time: 2012/09/25 - 21:35

Limit: FCC_Part15.209_RE(3m)

Margin: 0

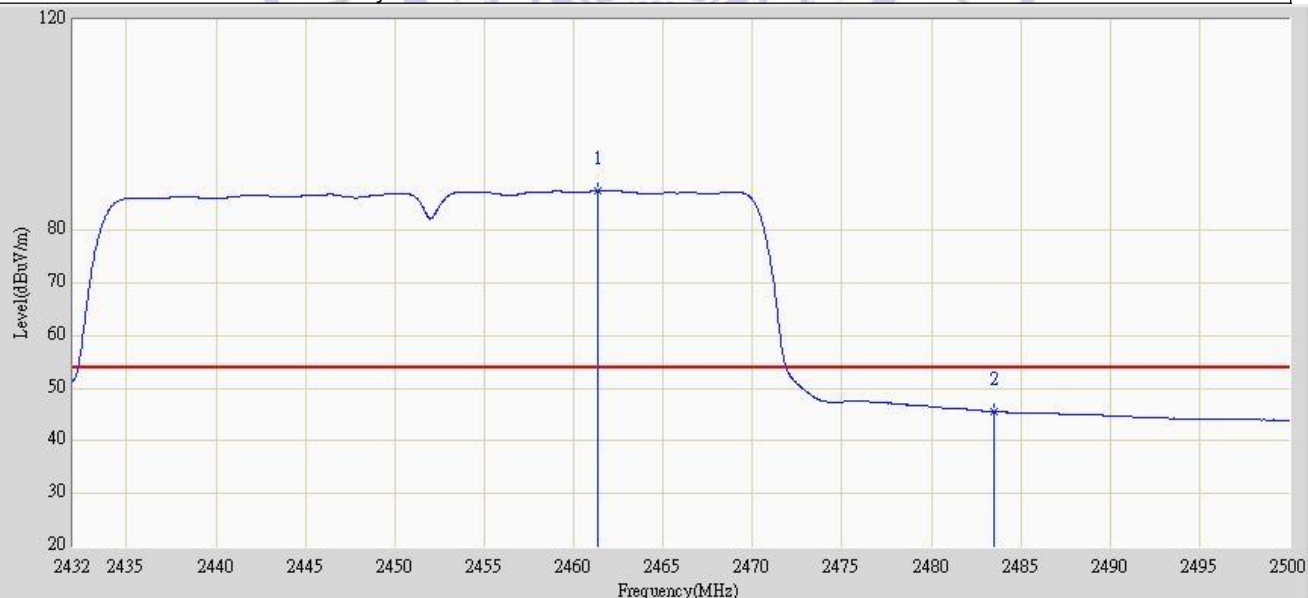
Probe: BBHA 9120D_499(1-18GHz)

Polarity: Vertical

EUT: Tablet PC

Power:By Battery

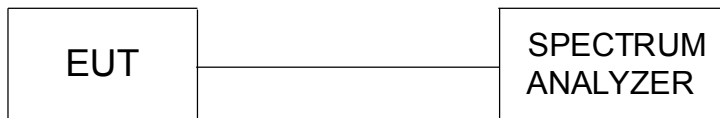
Note: Mode4: Transmit at channel 2452 by 802.11n40



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.342	87.578	55.988	N/A	N/A	31.589	AV
2		2483.500	45.511	13.897	-8.489	54.000	31.613	AV

4.6. Power Spectral Density Measurement

TEST CONFIGURATION



TEST PROCEDURE

The EUT was tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW= 100 kHz, VBW $\geq$ 300kHz, SPAN to 5-30 % greater than the EBW, Scale the observed power level to an equivalent value in 3 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where $BWCF = 10\log(3\text{ kHz}/100\text{kHz}) = -15.2\text{ dB}$.

LIMIT

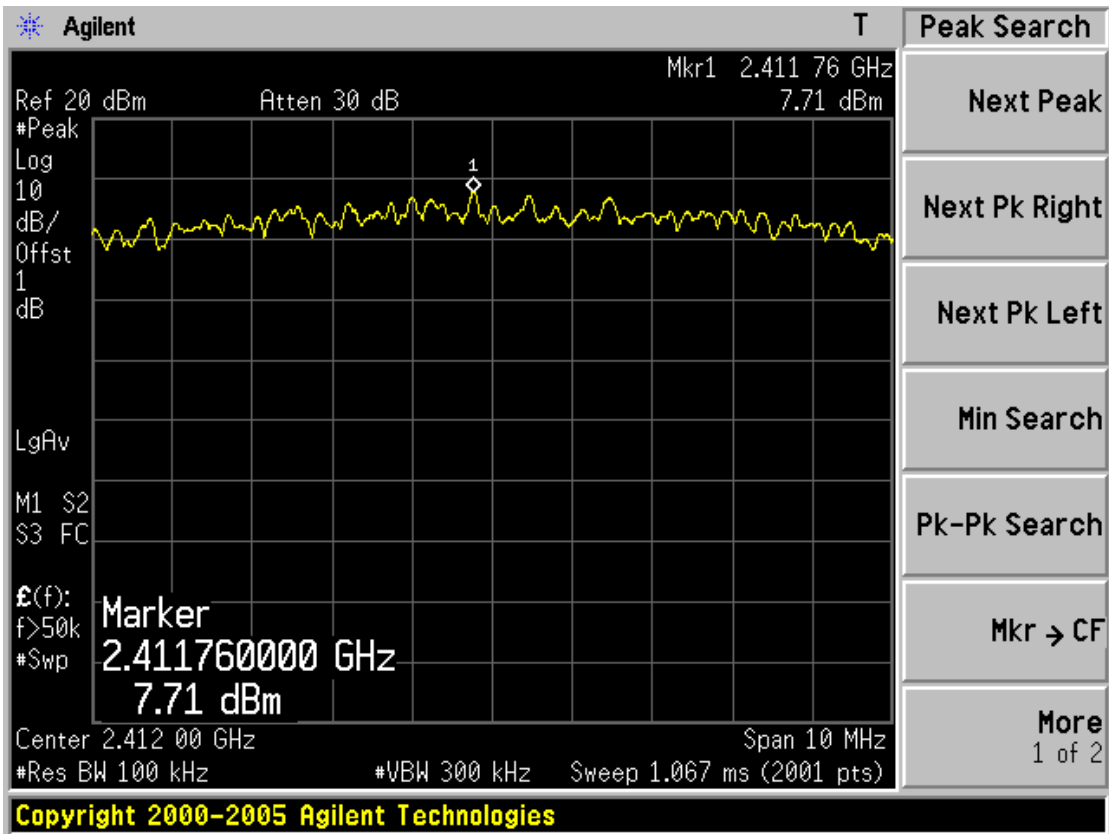
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

TEST RESULTS

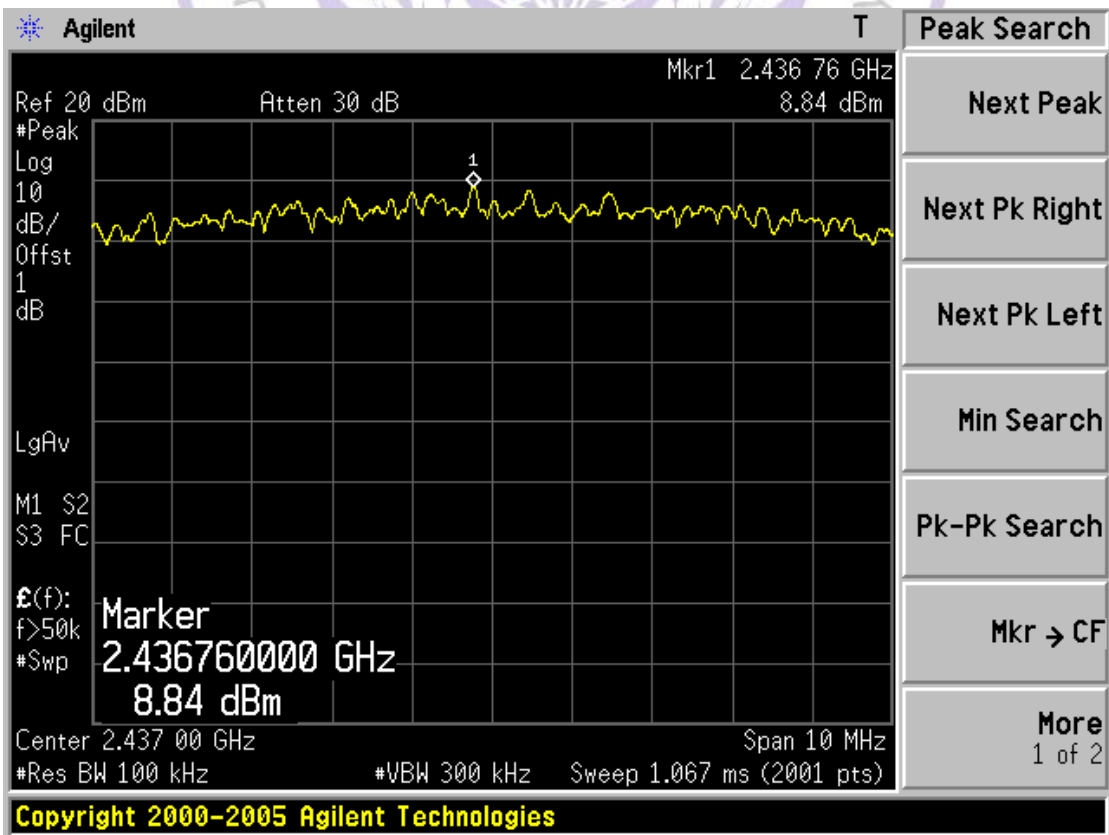
Channel	Channel Frequency (MHz)	Reading Value (dBm)	BWCF (dB)	PSD(dBm)	Maximum limit (dBm)	PASS / FAIL
1	2412	7.71	-15.2	-7.49	8	PASS
6	2437	8.84	-15.2	-6.36	8	PASS
11	2462	9.58	-15.2	-5.62	8	PASS
1	2412	0.07	-15.2	-15.13	8	PASS
6	2437	1.80	-15.2	-13.40	8	PASS
11	2462	3.01	-15.2	-12.19	8	PASS
1	2412	0.41	-15.2	-14.79	8	PASS
6	2437	1.74	-15.2	-13.46	8	PASS
11	2462	2.49	-15.2	-12.71	8	PASS
3	2422	-4.45	-15.2	-19.56	8	PASS
6	2437	-3.36	-15.2	-18.56	8	PASS
9	2452	-2.81	-15.2	-18.01	8	PASS

For 802.11b Mode:

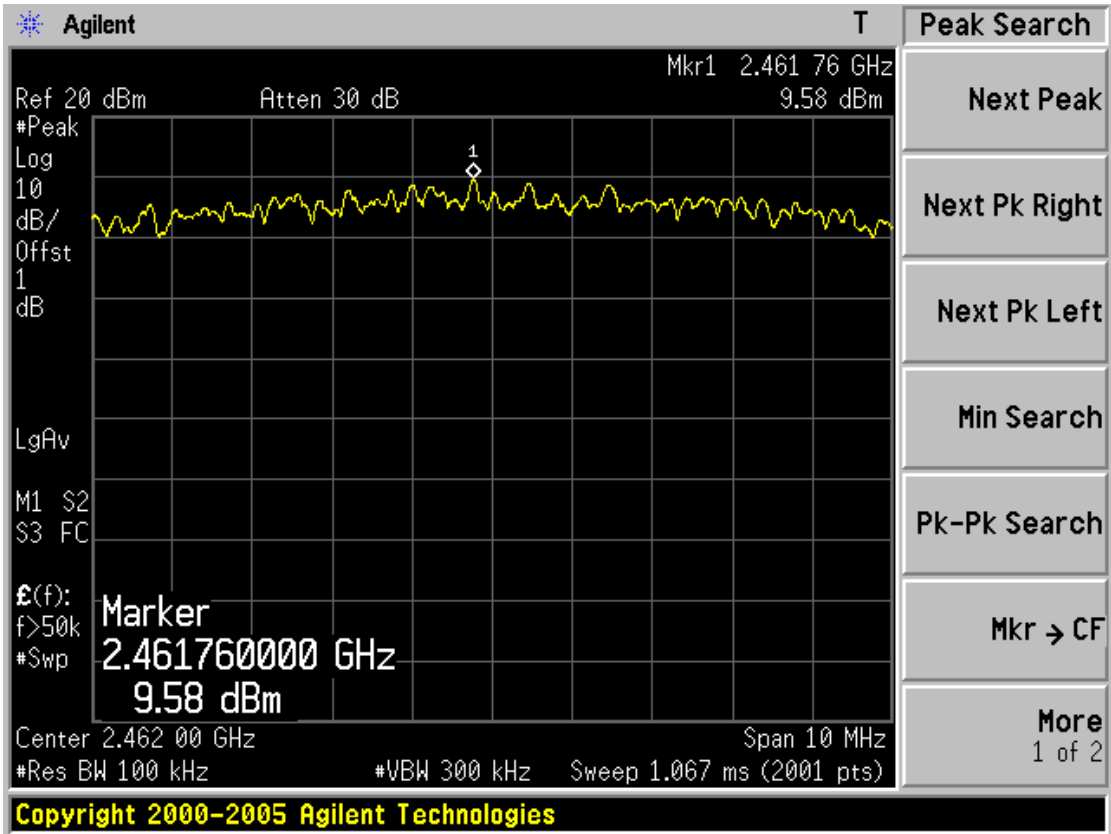
CH1



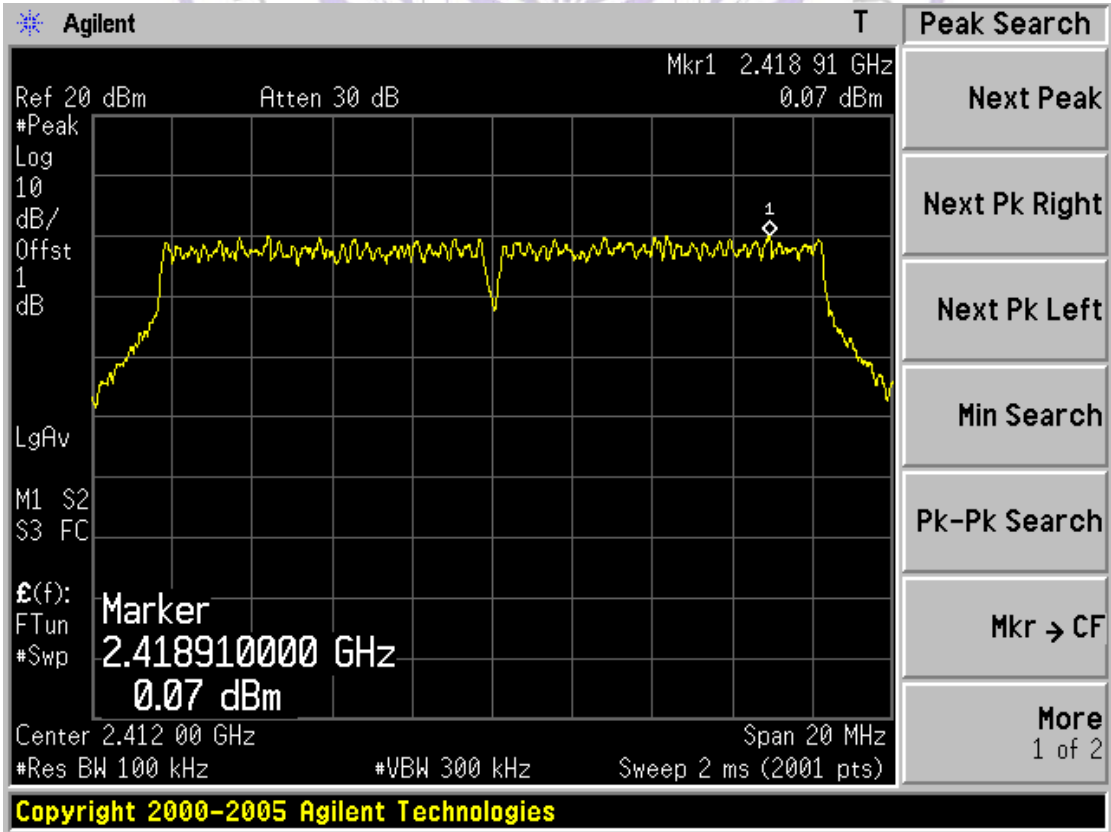
CH6



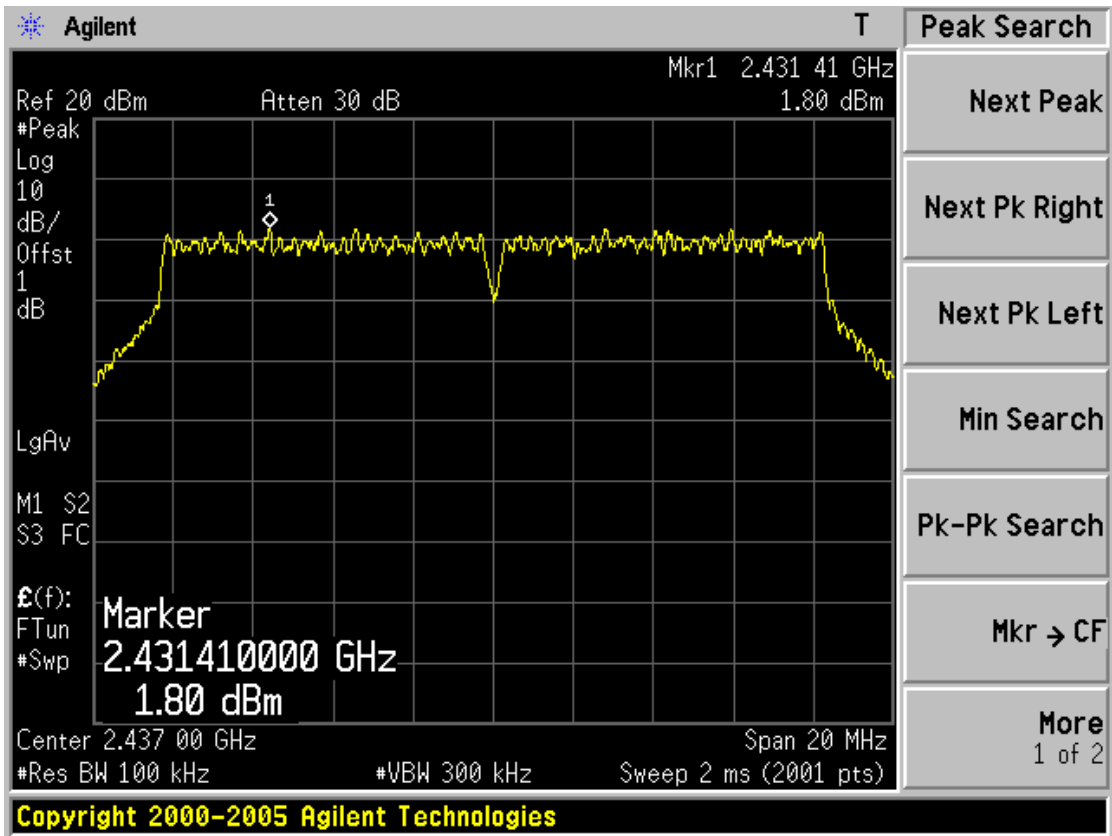
CH11



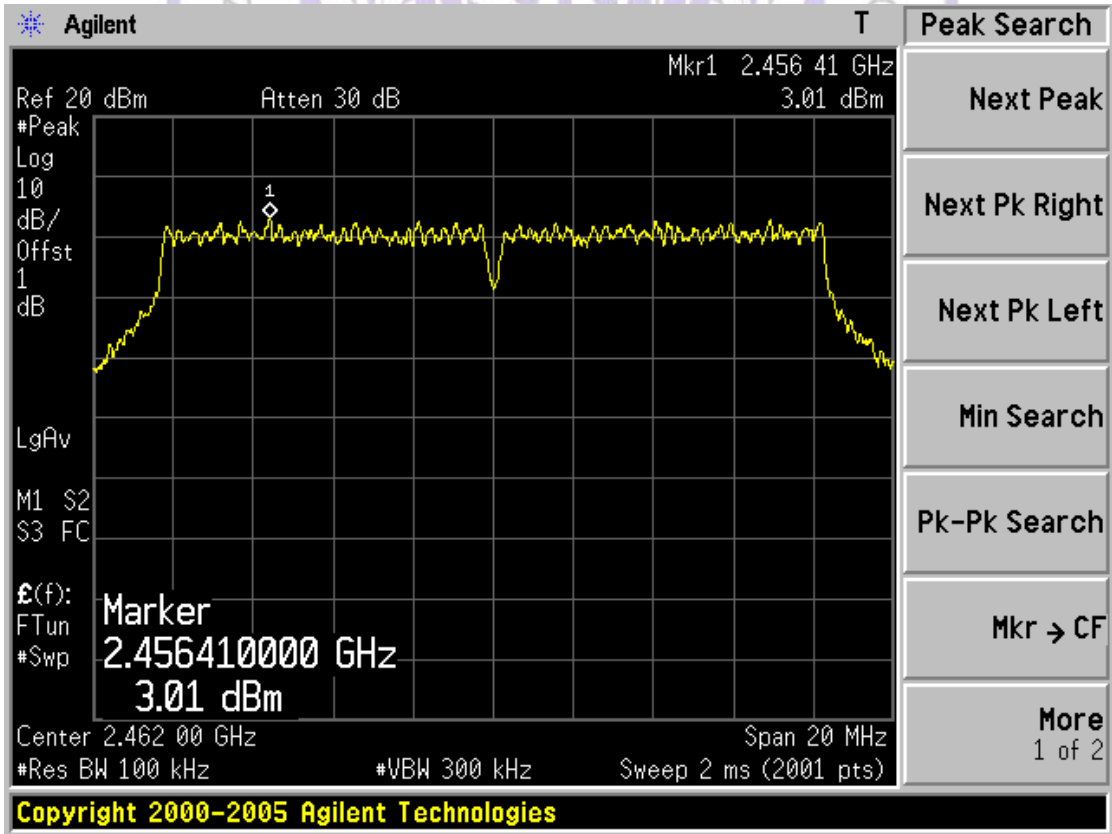
For 802.11g Mode:



CH6

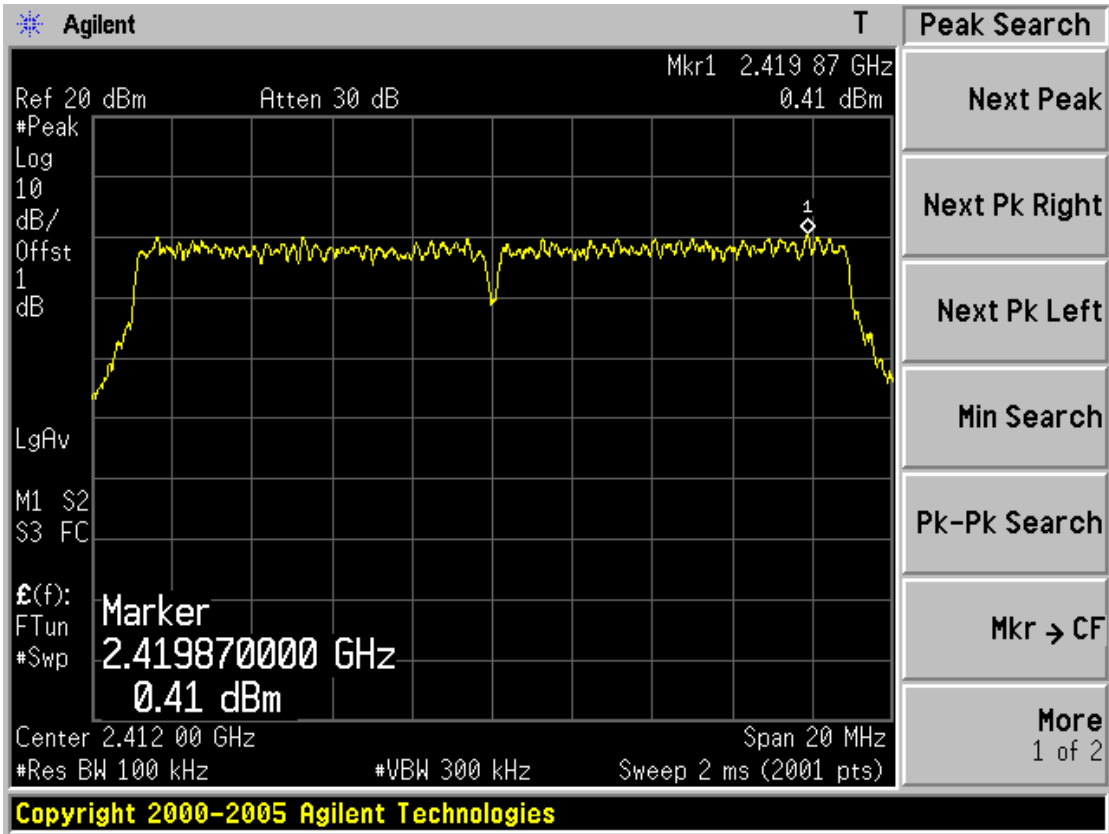


CH11

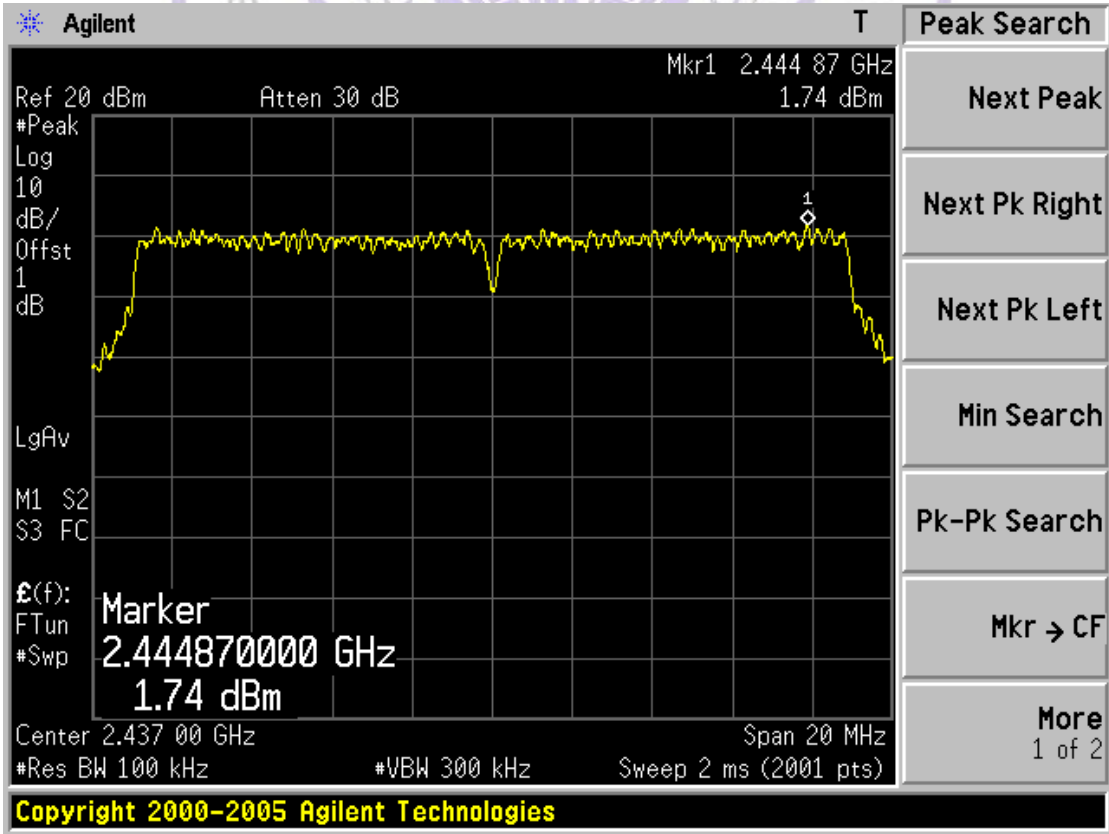


For 802.11n (20MHz) Mode:

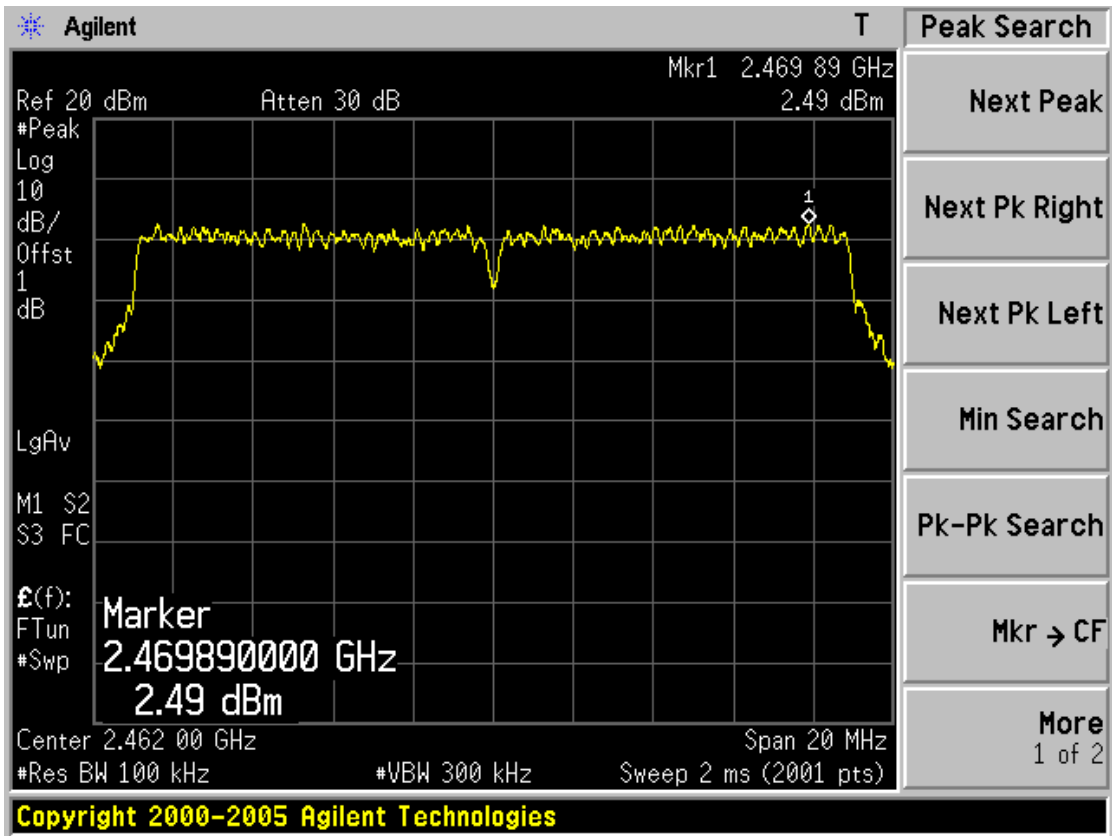
CH1



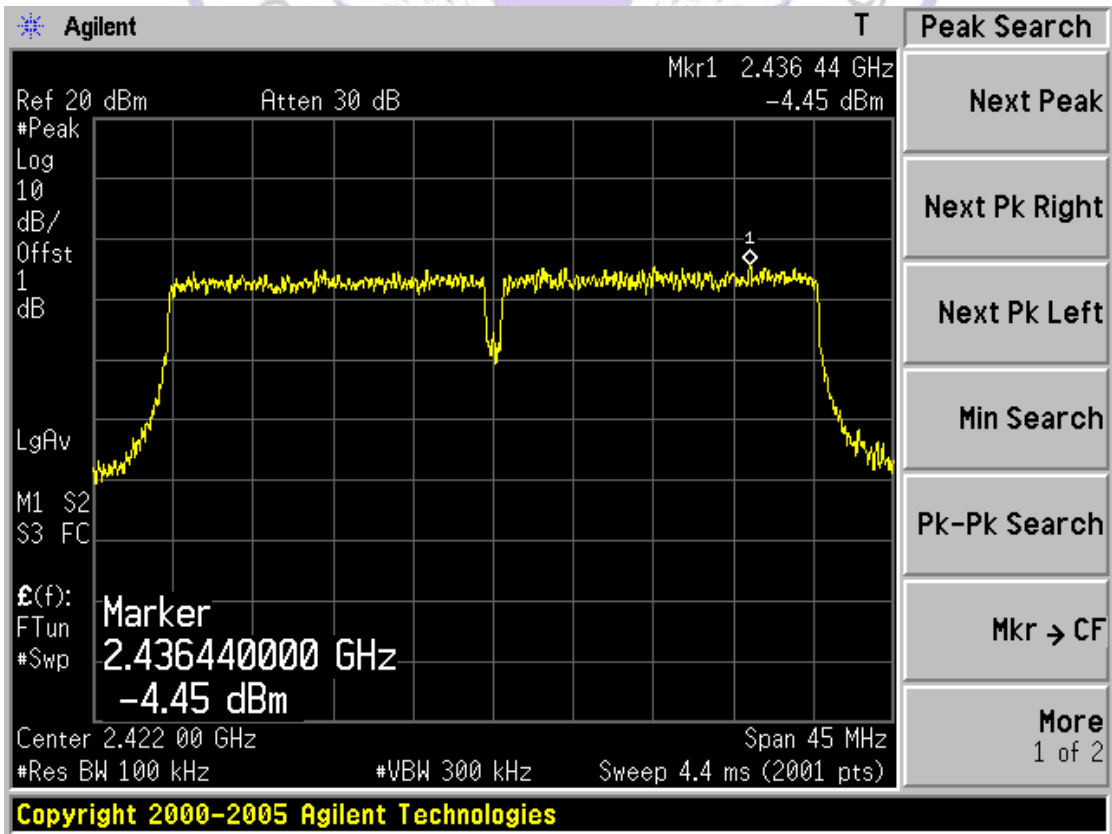
CH6



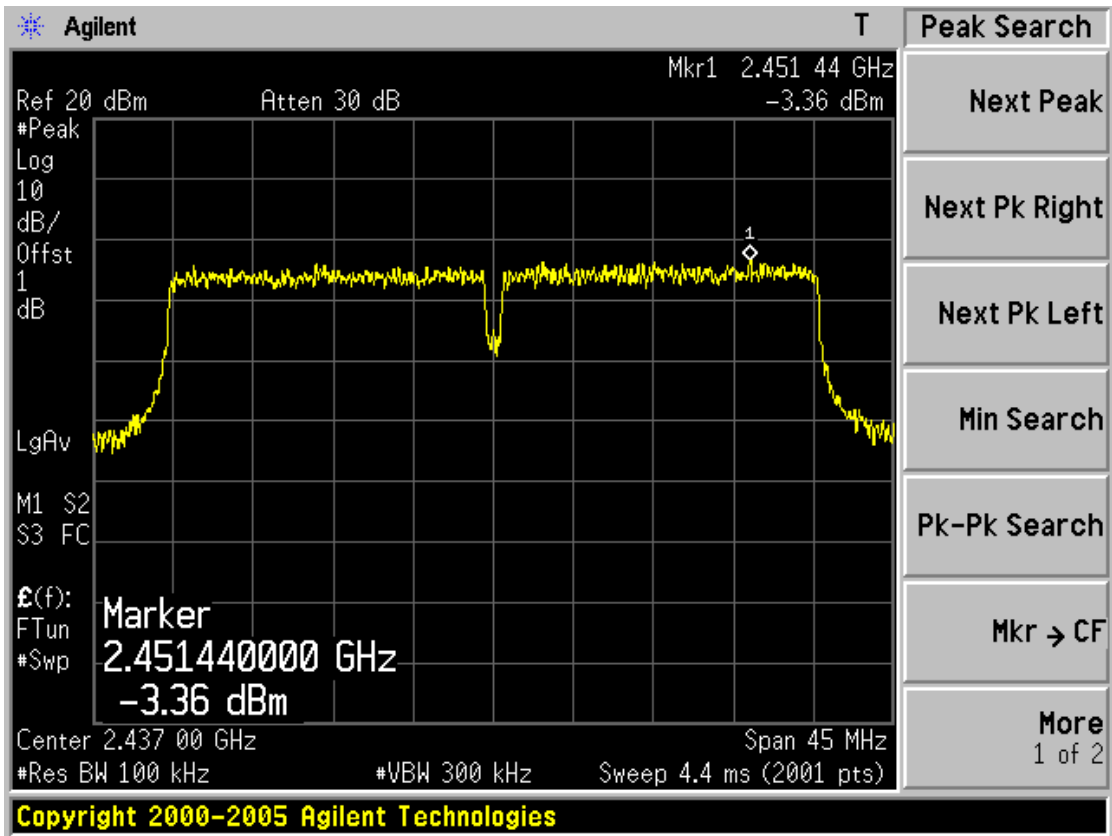
CH11



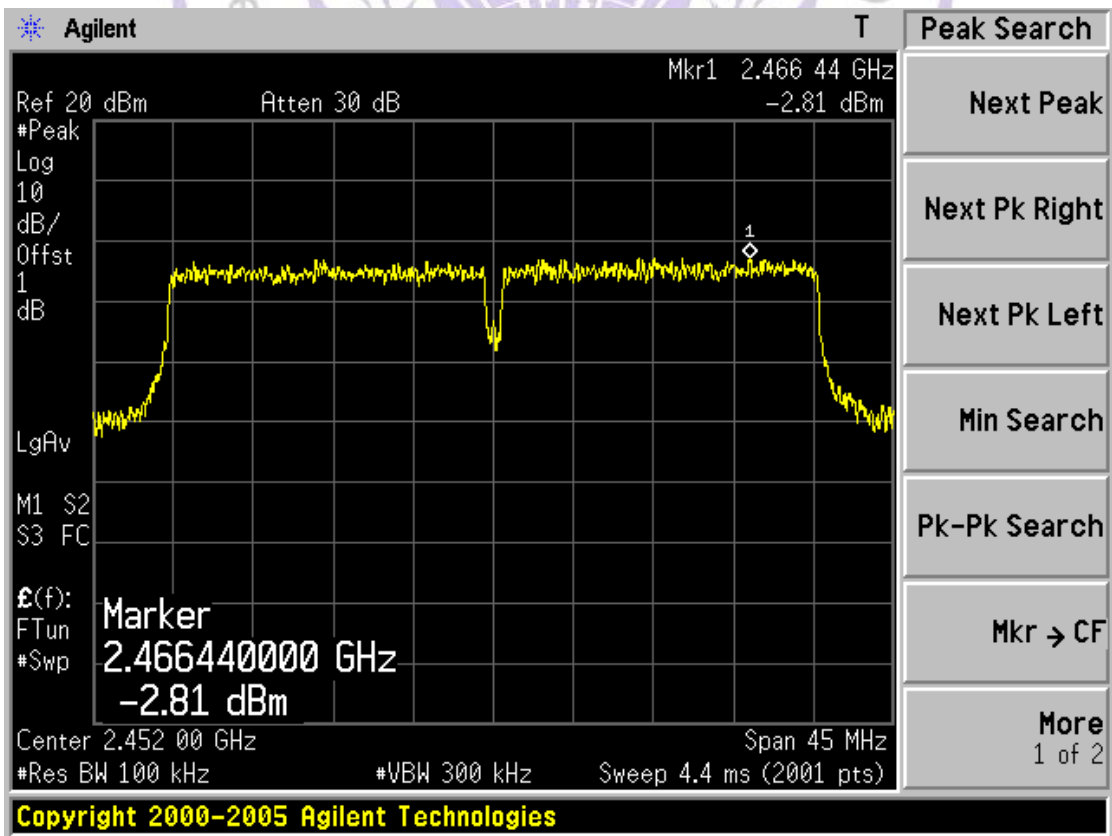
For 802.11n (40MHz) Mode:



CH6



CH9



4.7. Spurious RF Conducted Emission

TEST CONFIGURATION



TEST PROCEDURE

The EUT was tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements. The Spurious RF conducted emissions compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10-2009 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 measure frequency range from 30MHz to 26.5GHz.

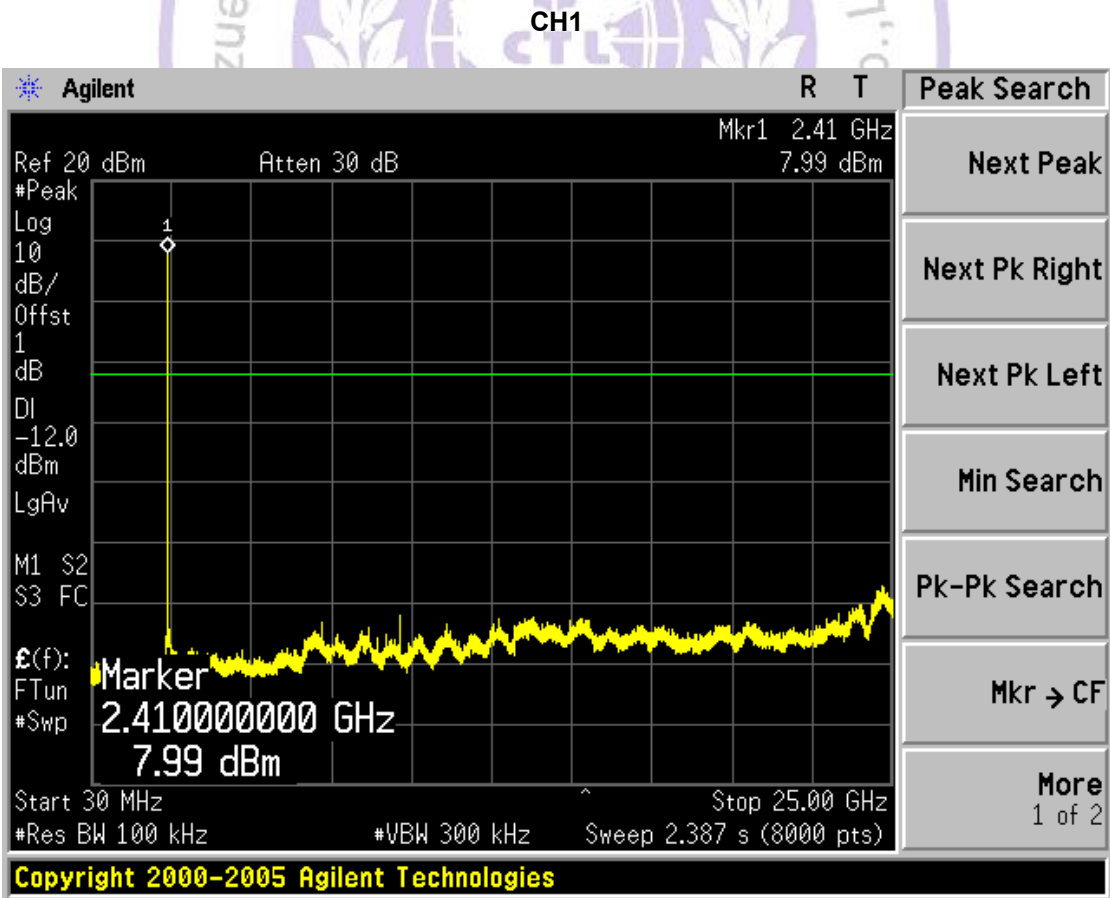
LIMIT

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, provided the transmitter demonstrates compliance with the peak conducted power limits.

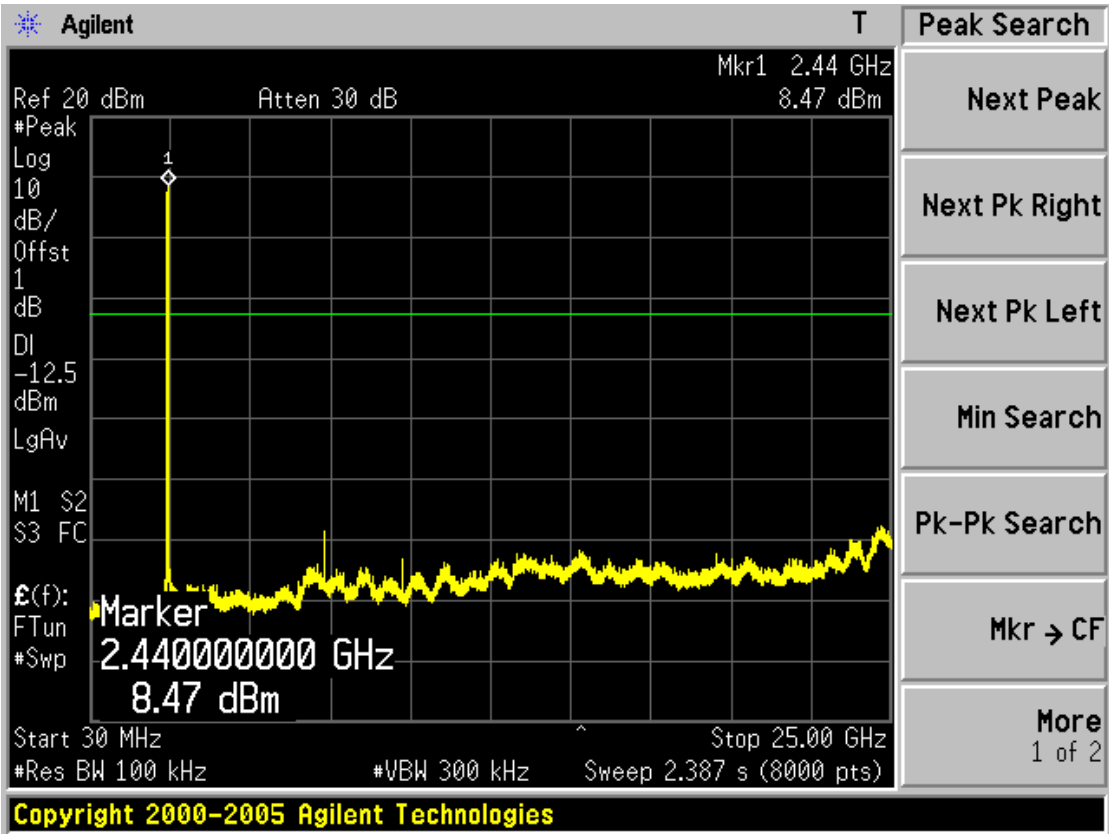
TEST RESULTS

Photos of Spurious RF Conducted Emission Measurement

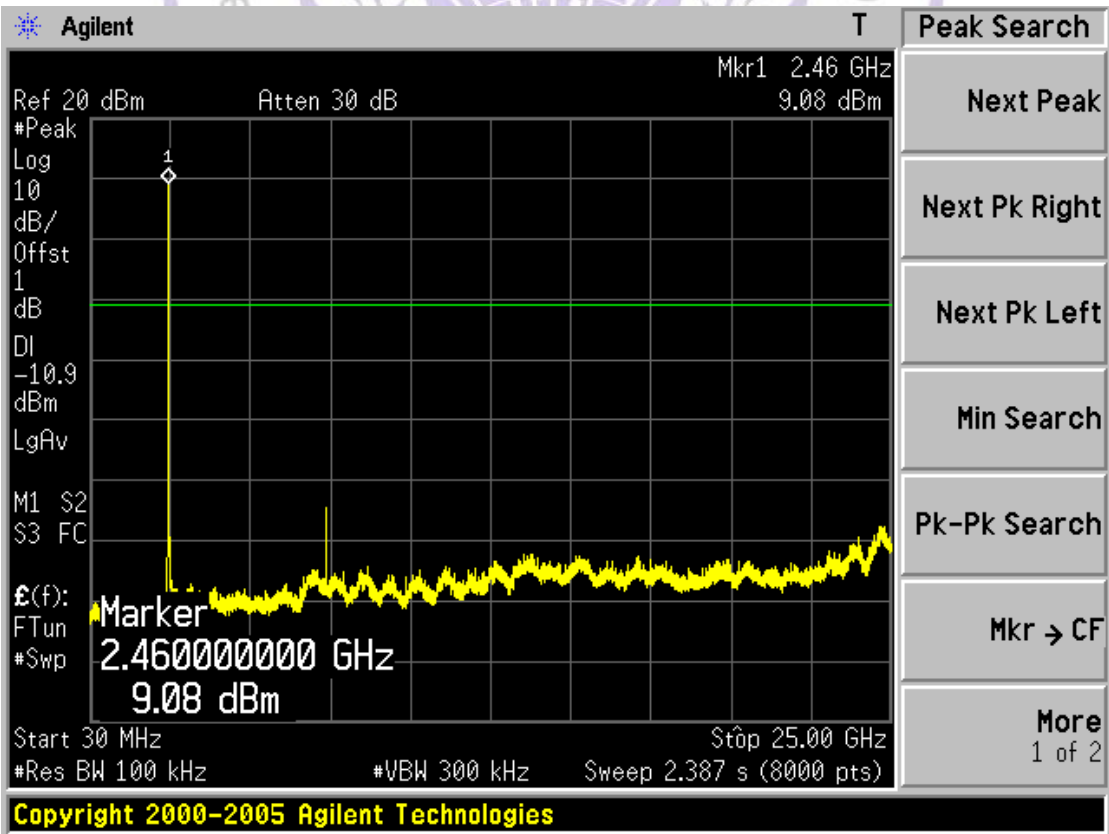
For 802.11b Mode:



CH6

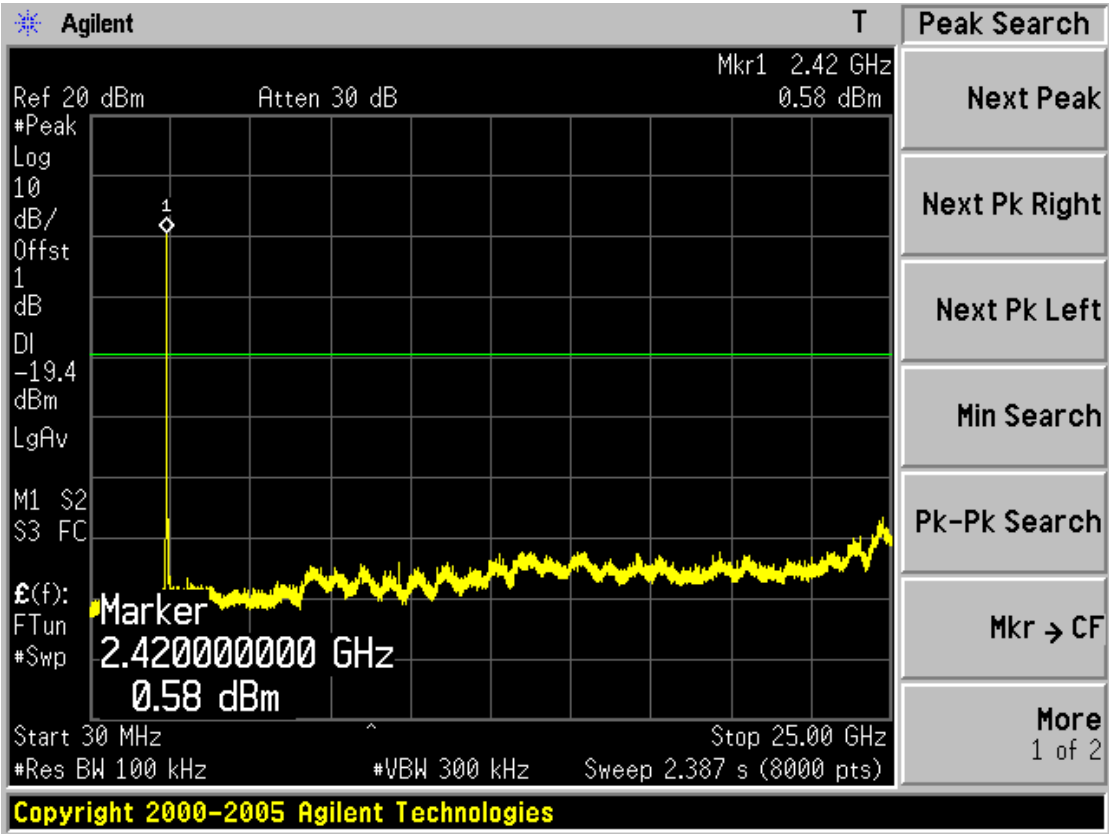


CH11

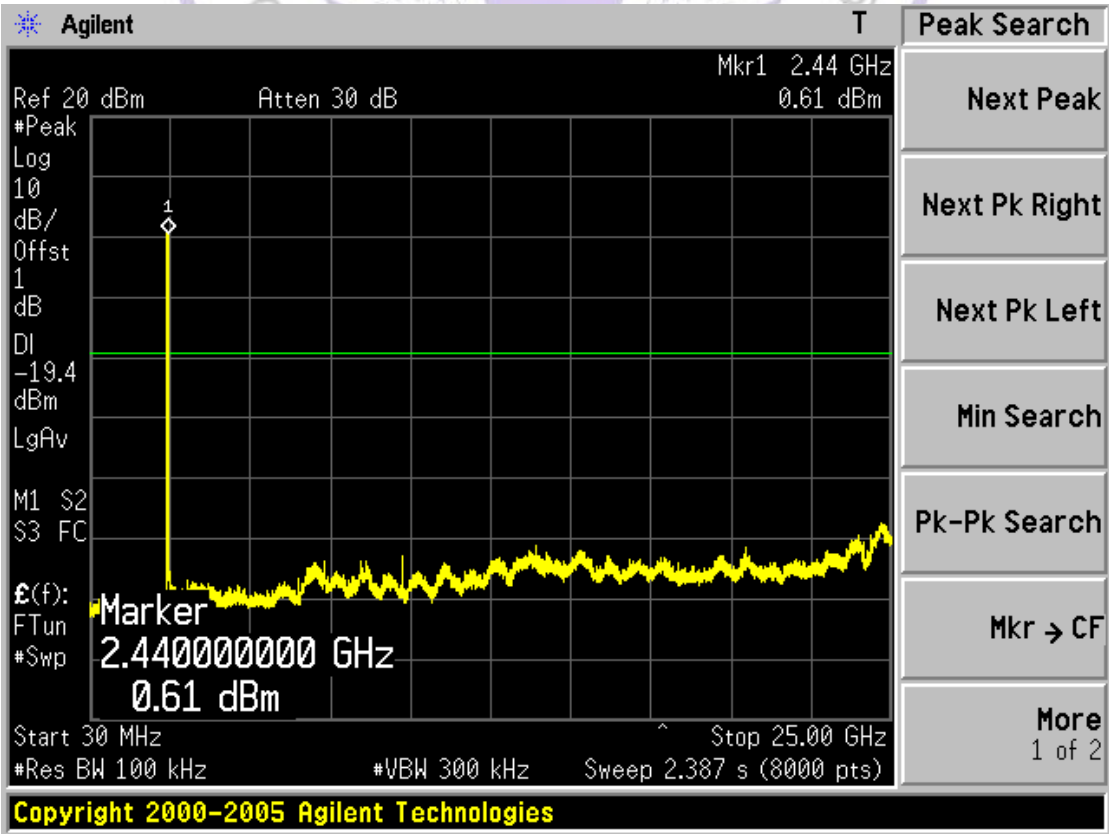


For 802.11g Mode:

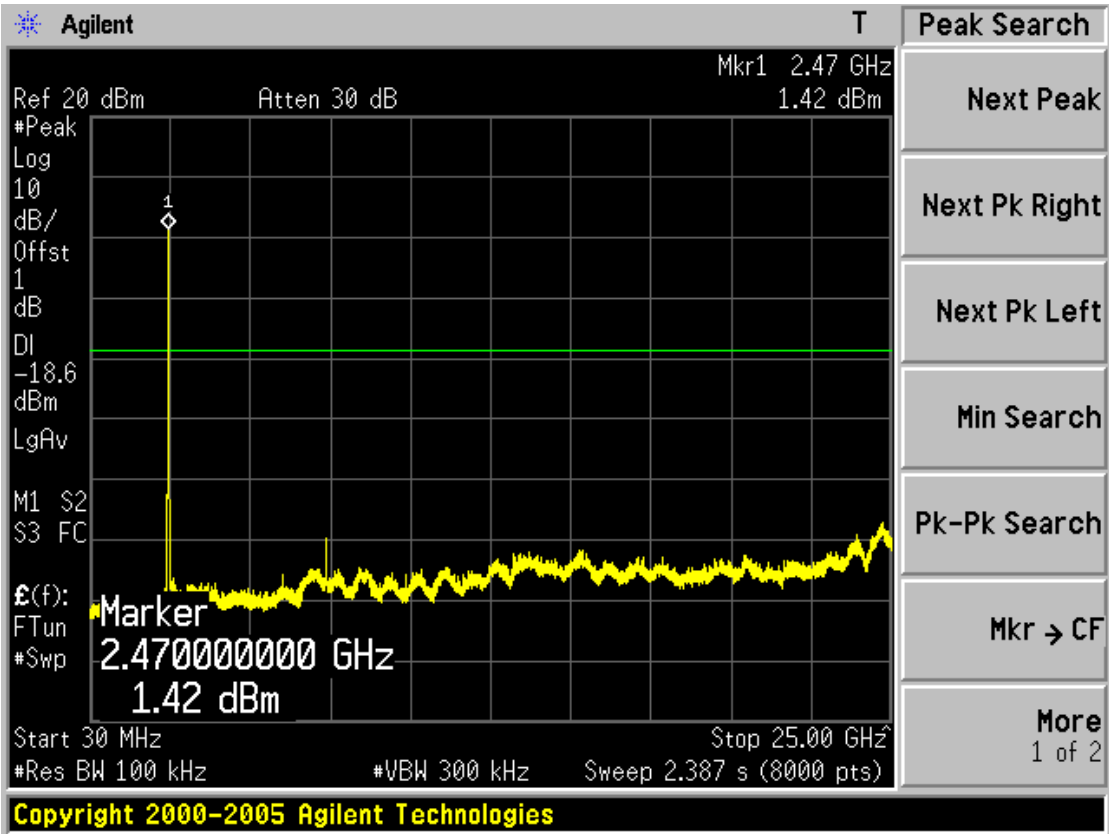
CH1



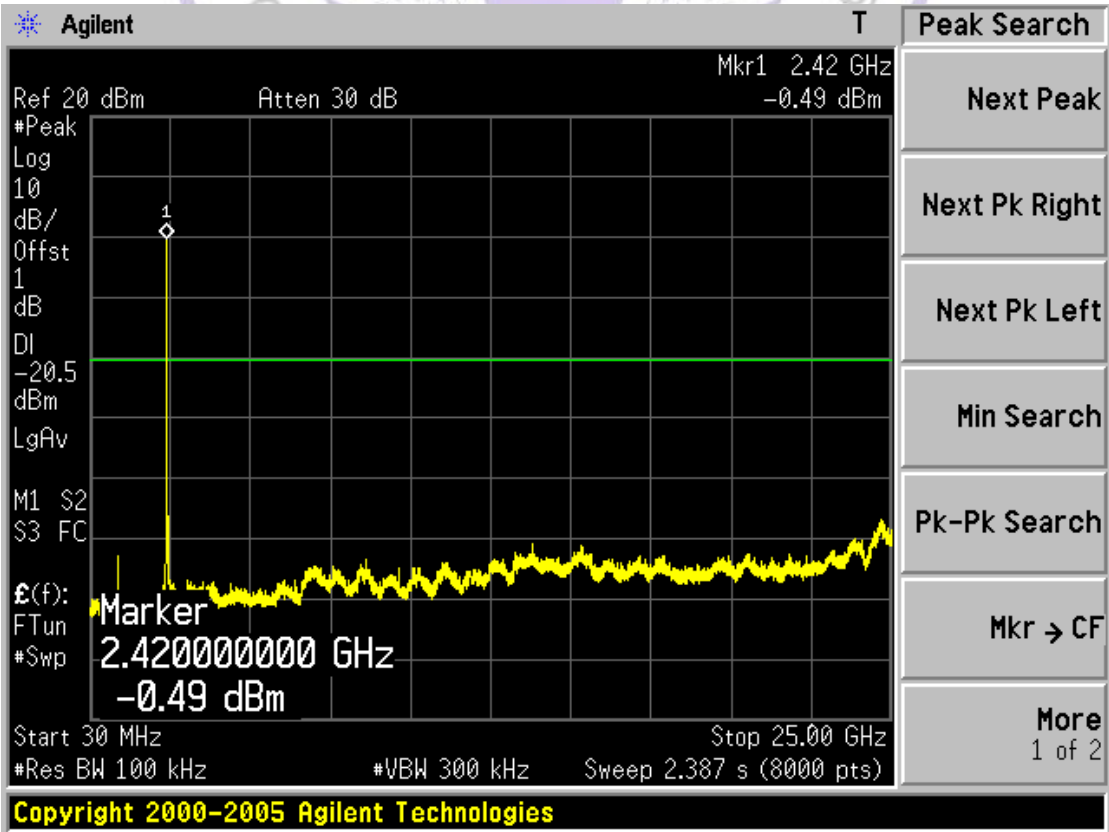
CH6



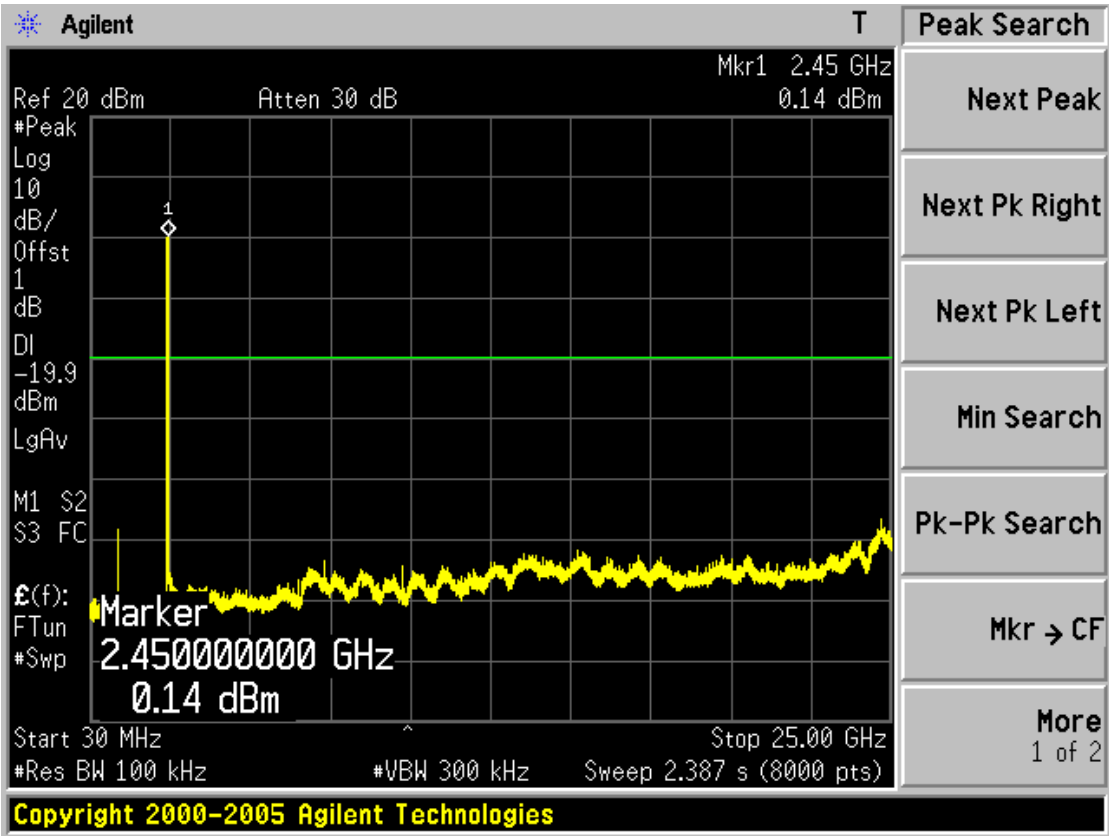
CH11



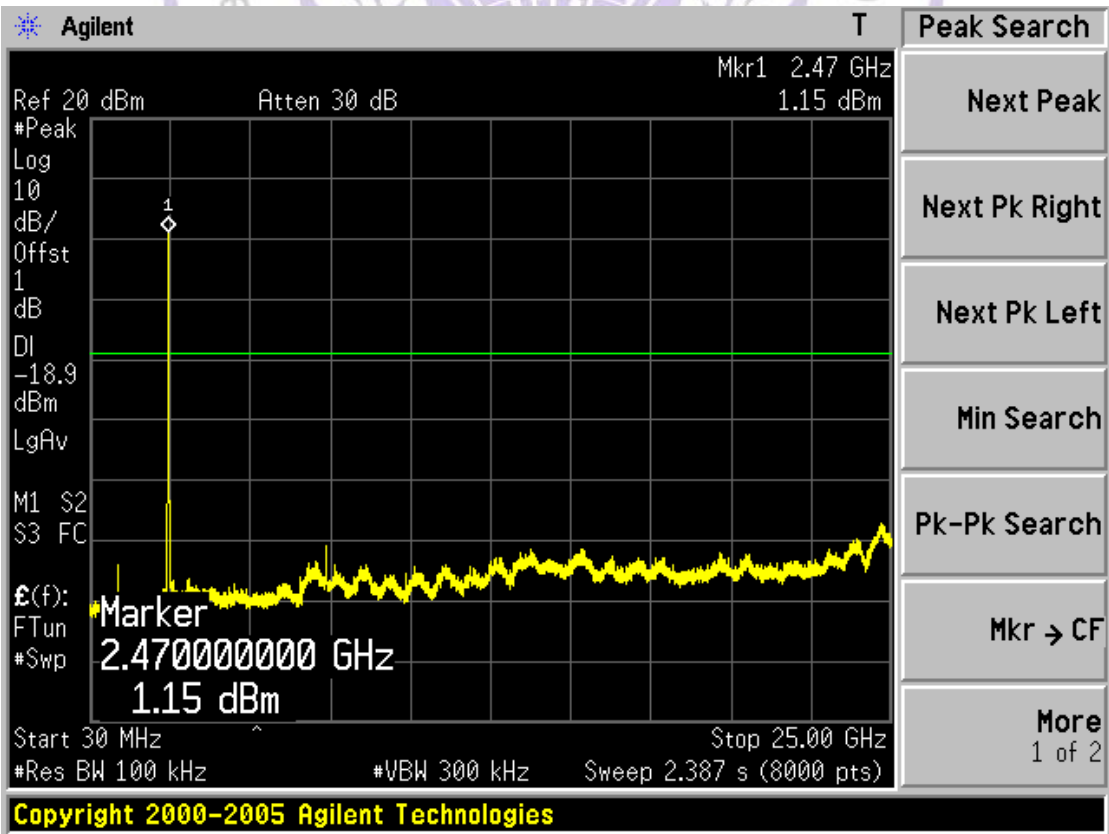
For 802.11n (20MHz) Mode:



CH6

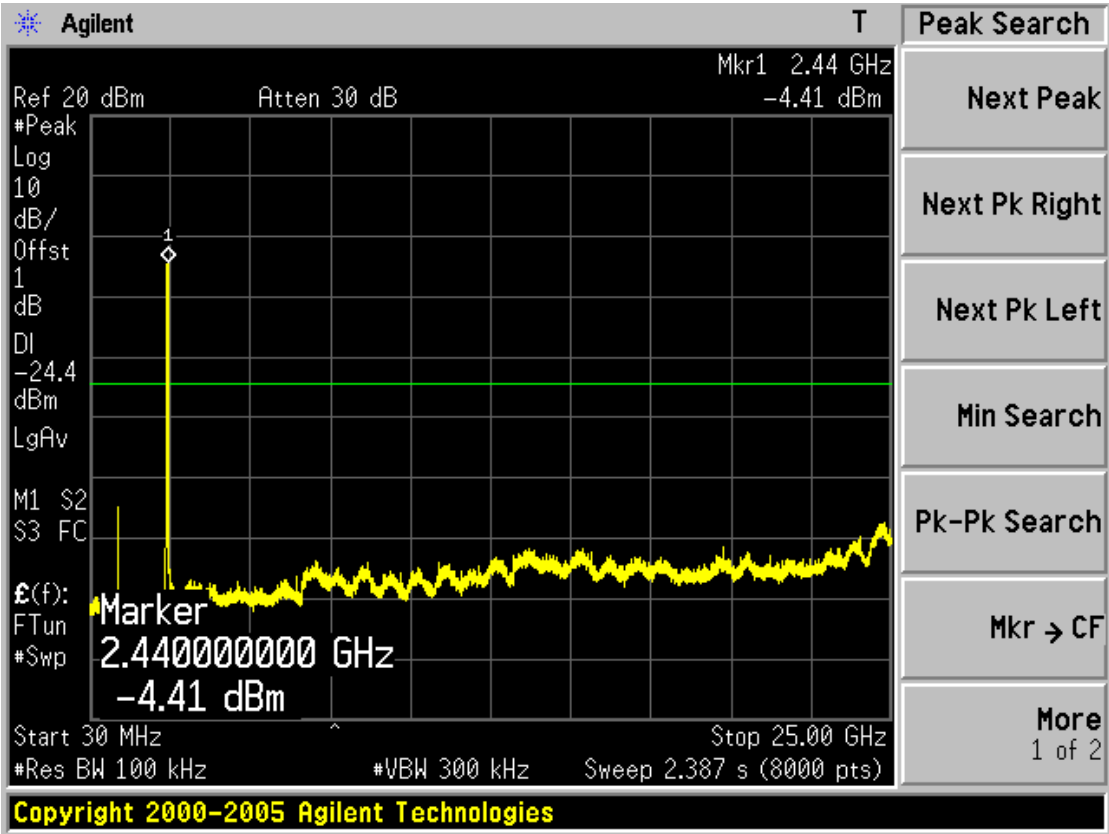


CH11

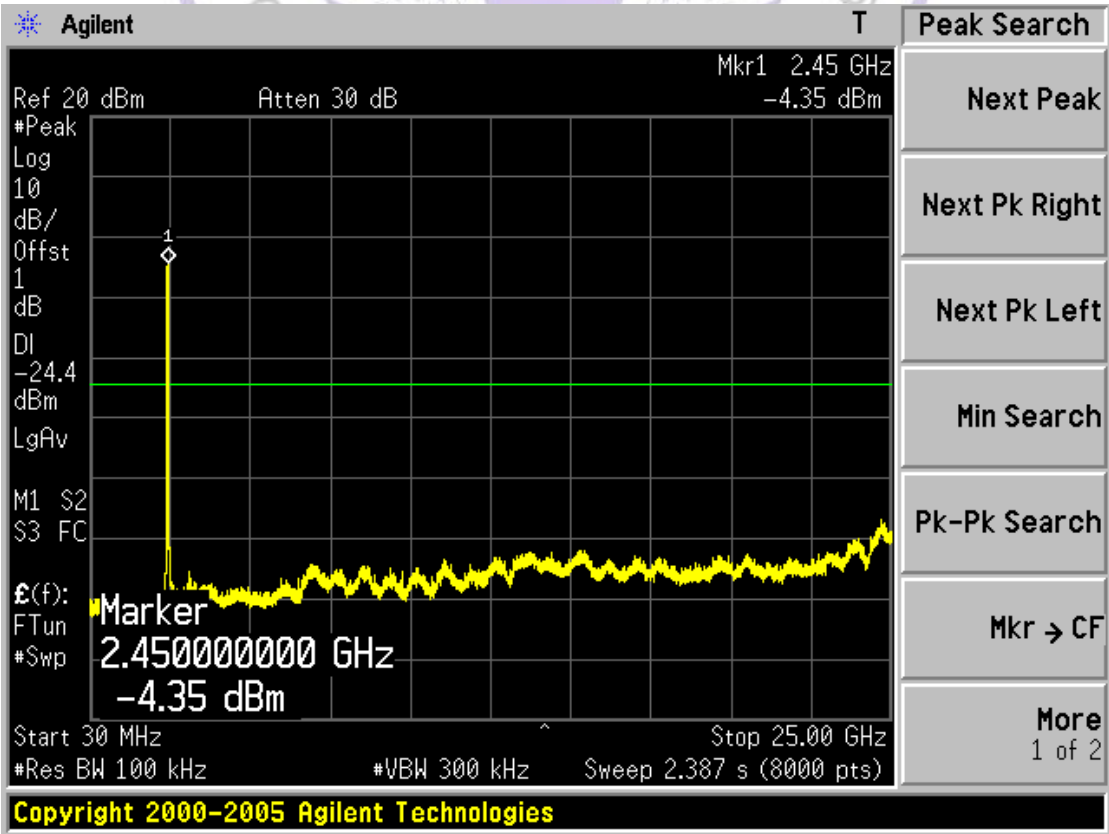


For 802.11n (40MHz) Mode:

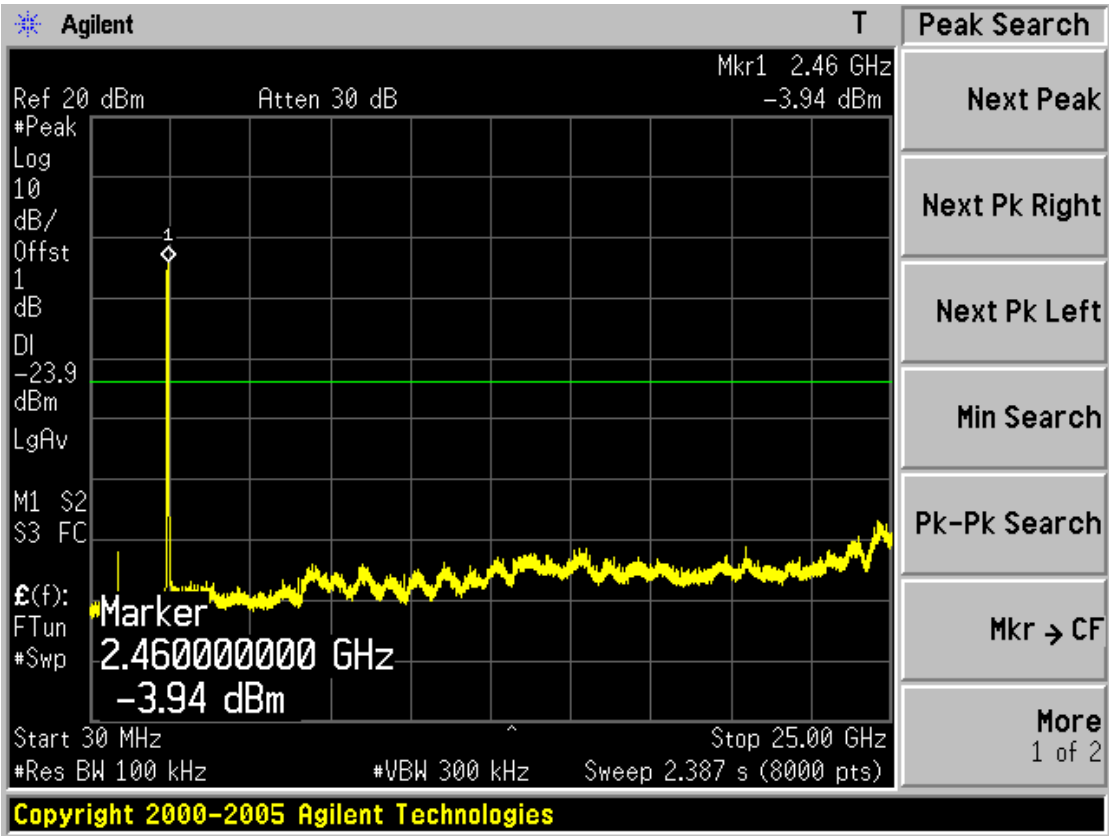
CH3



CH6



CH9



4.8. Operation Frequency Range of 20dB Bandwidth

TEST CONFIGURATION



TEST PROCEDURE

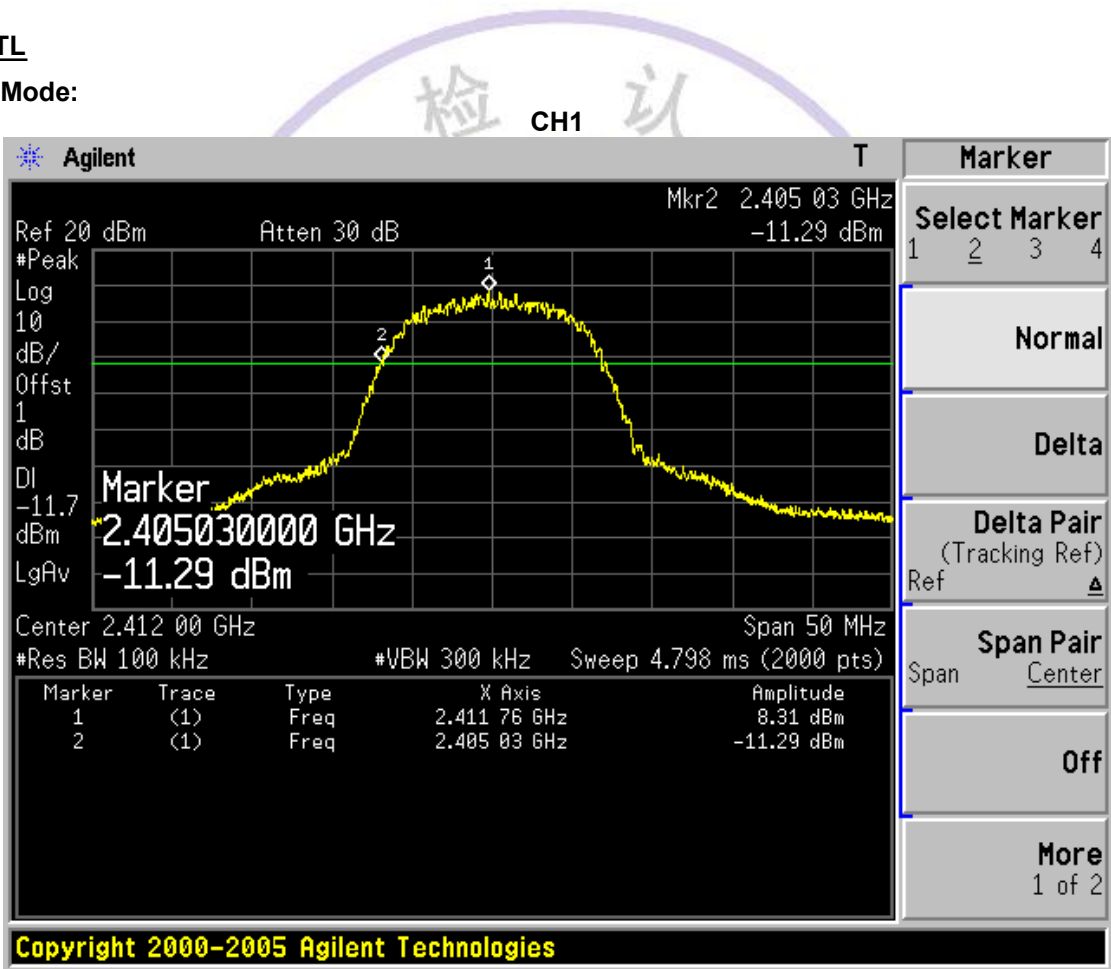
The EUT was tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW = 100 kHz, Span greater than RBW.

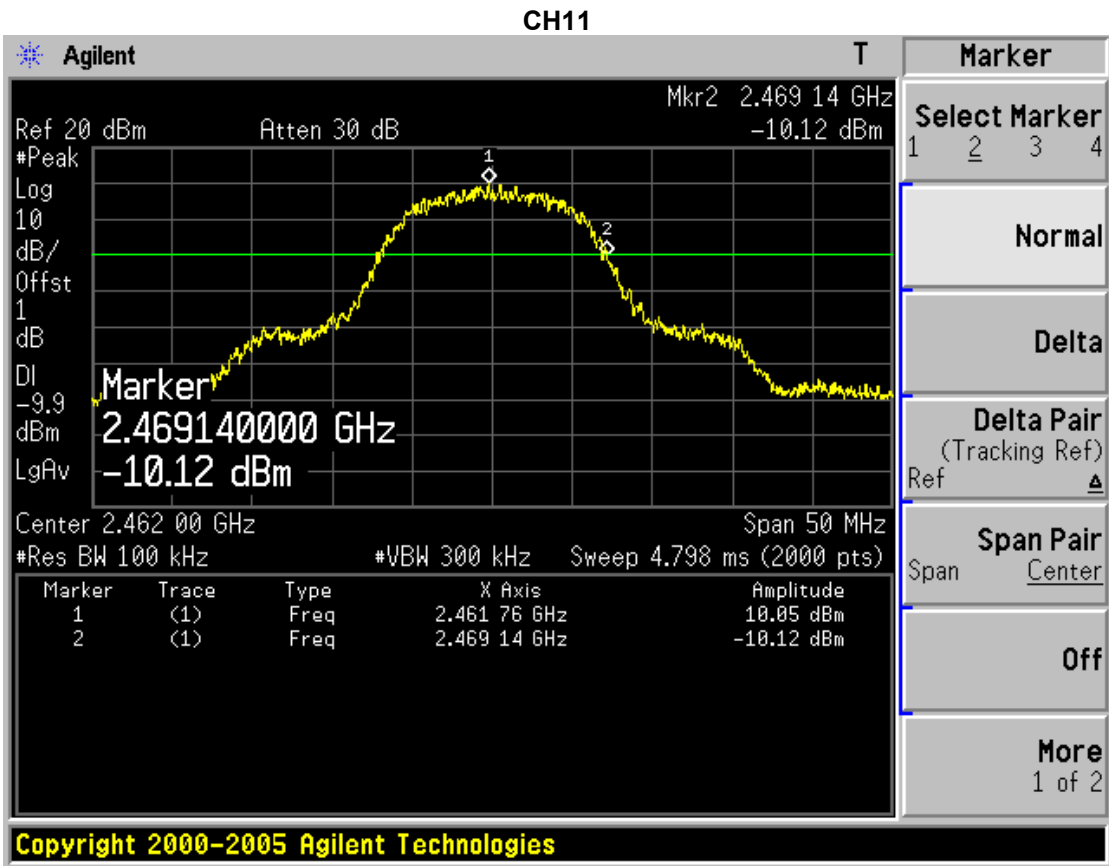
LIMIT

20 dB bandwidth of the emission is contained within the operation frequency band.

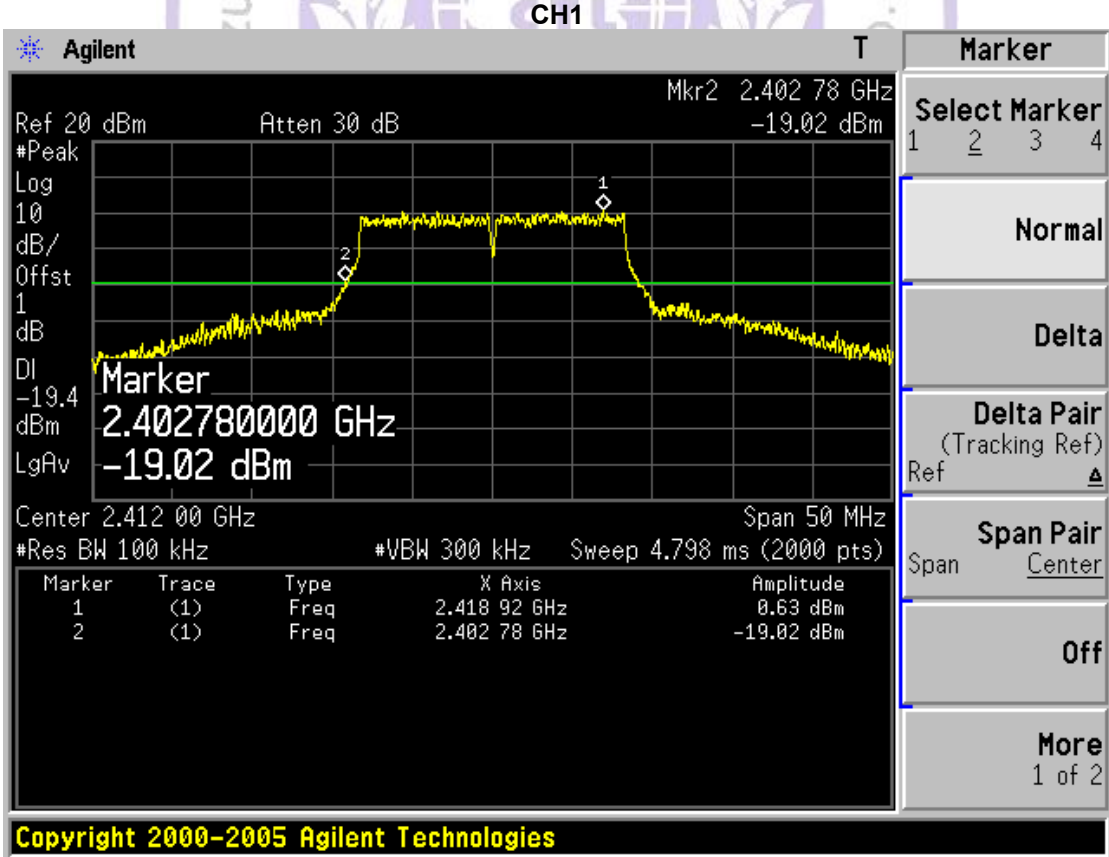
TEST RESULT

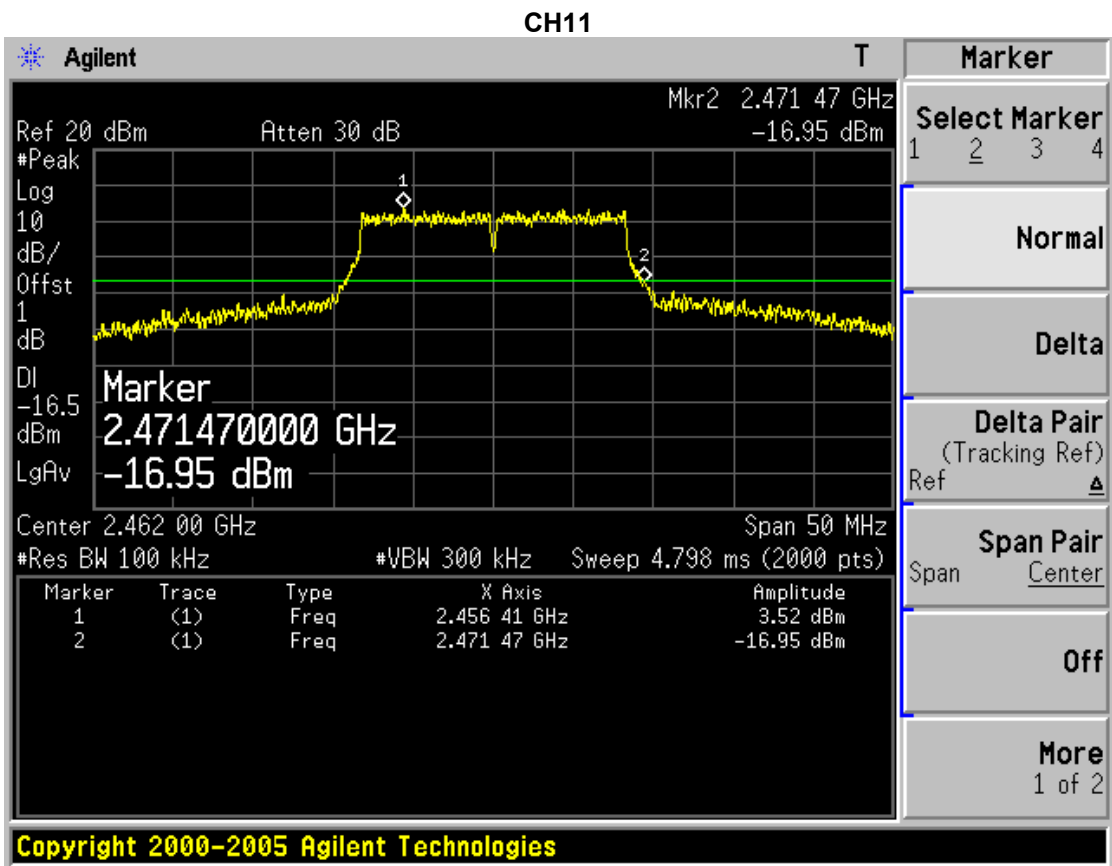
For 802.11b Mode:



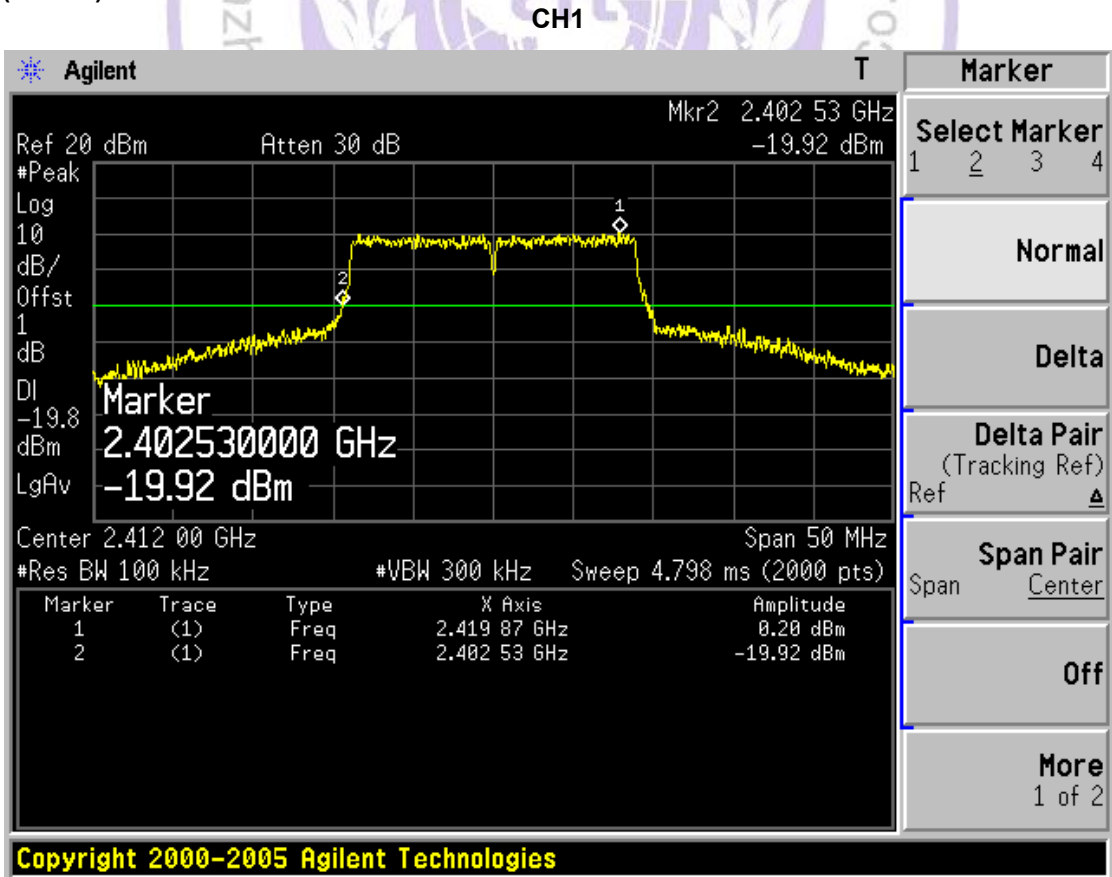


For 802.11g Mode:

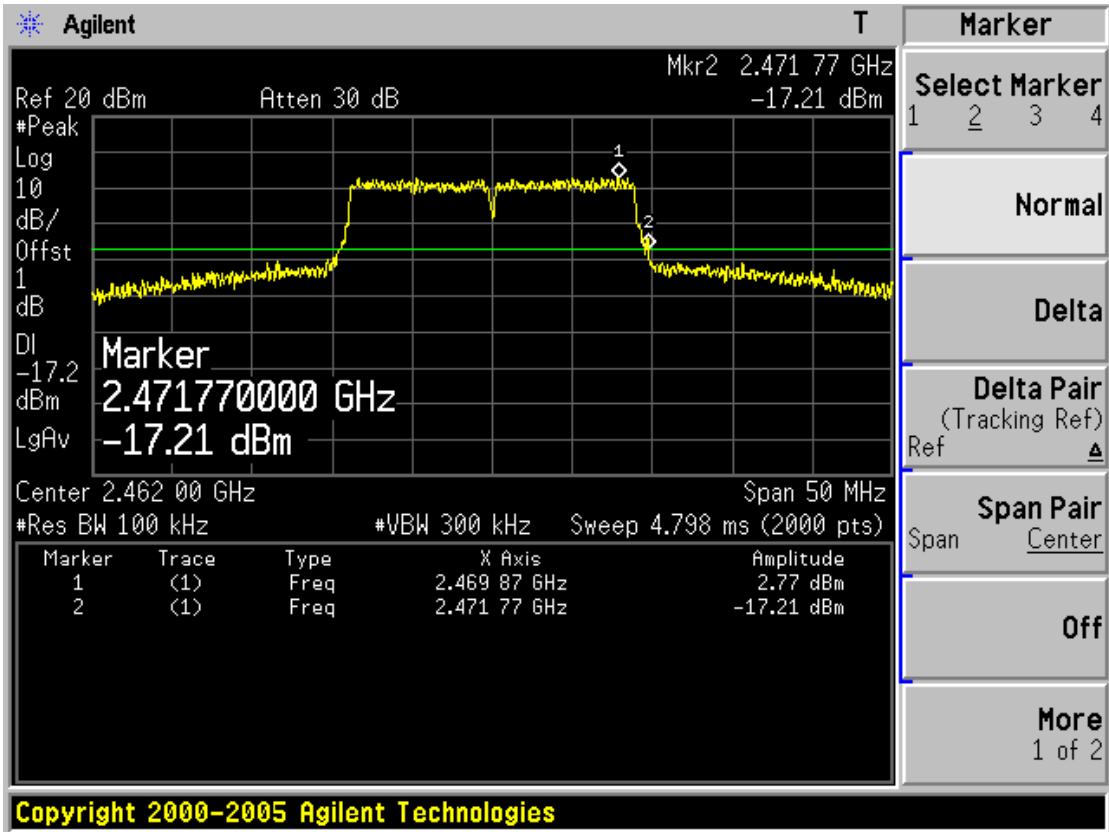




For 802.11n (20MHz) Mode:

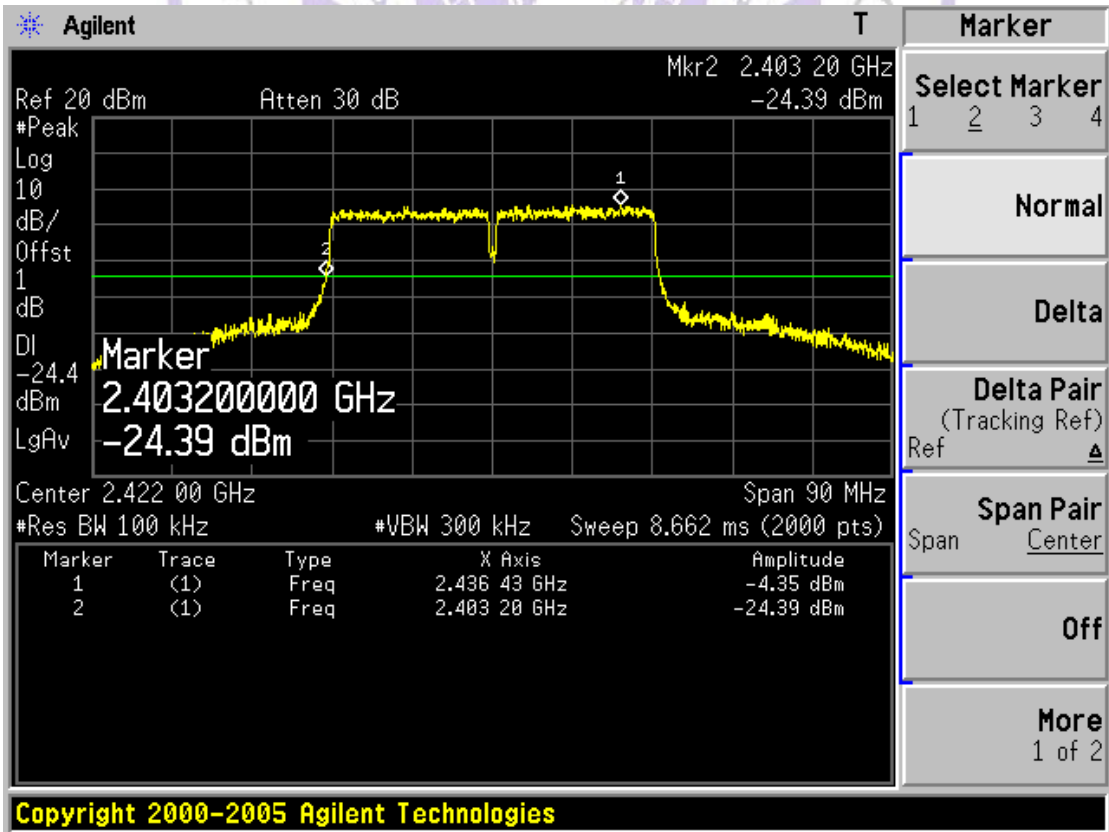


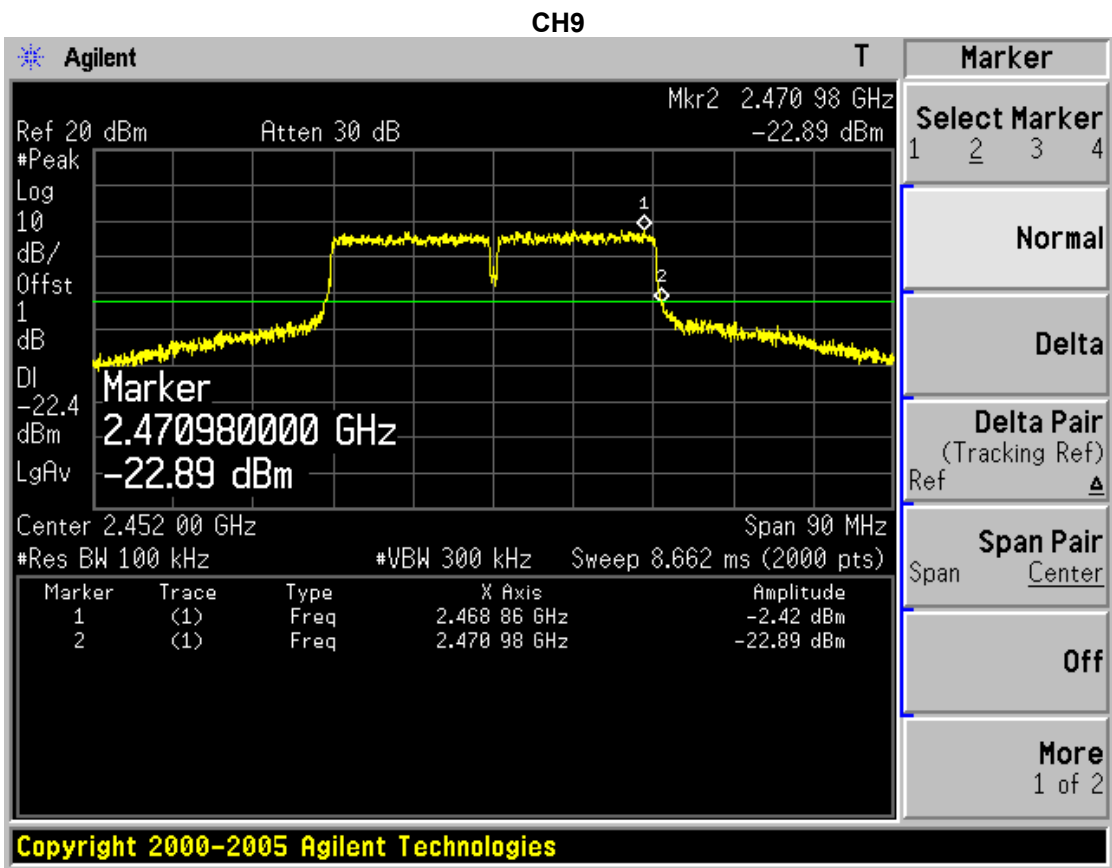
CH11



For 802.11n (40MHz) Mode:

CH3





4.9. 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.

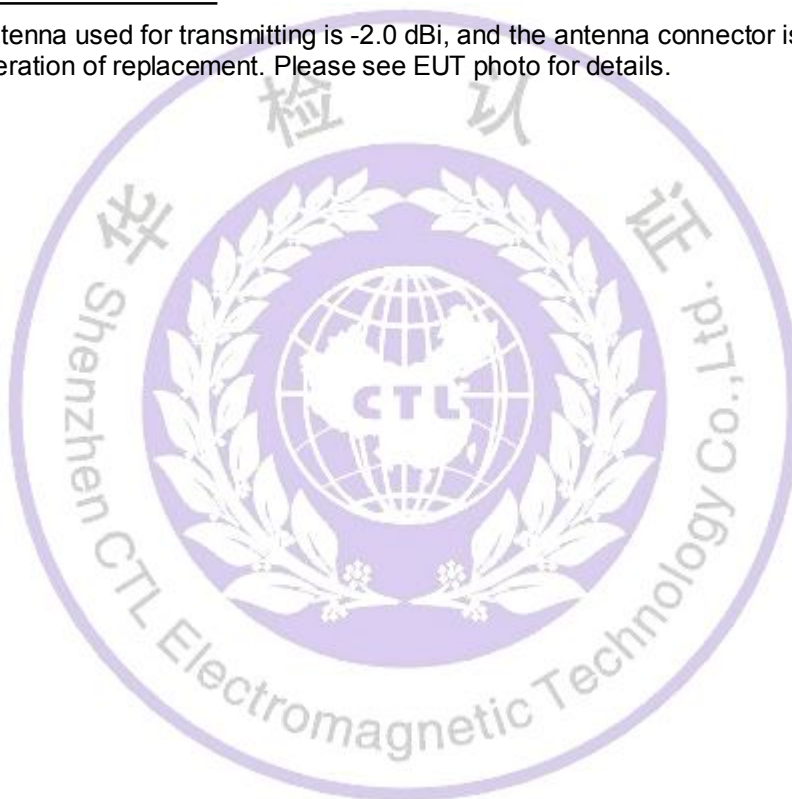
And according to FCC 47 CFR Section 15.247 (c), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

Refer to statement below for compliance.

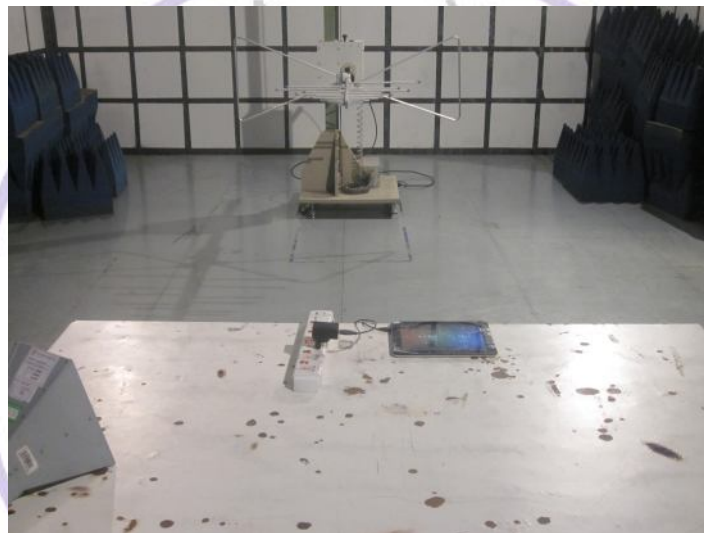
The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

ANTENNA CONNECTED CONSTRUCTION

The directional gains of antenna used for transmitting is -2.0 dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Please see EUT photo for details.



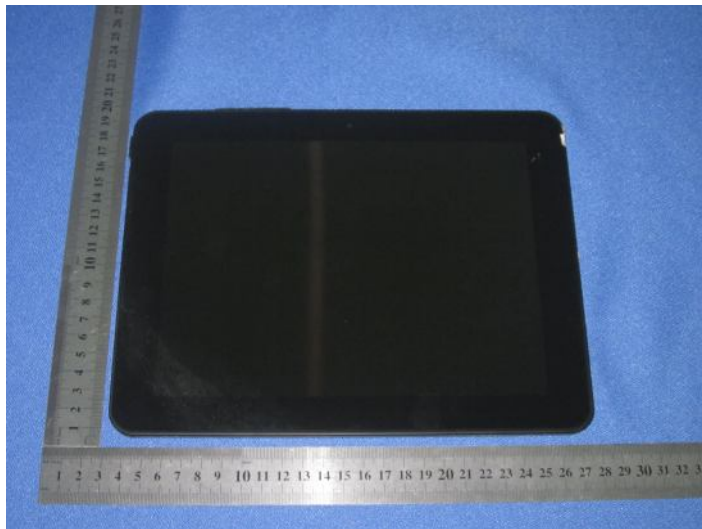
5. Test Setup Photos of the EUT



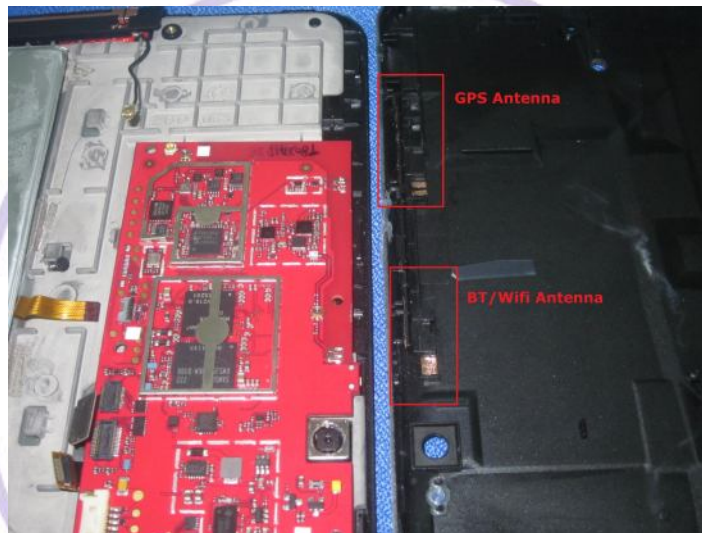


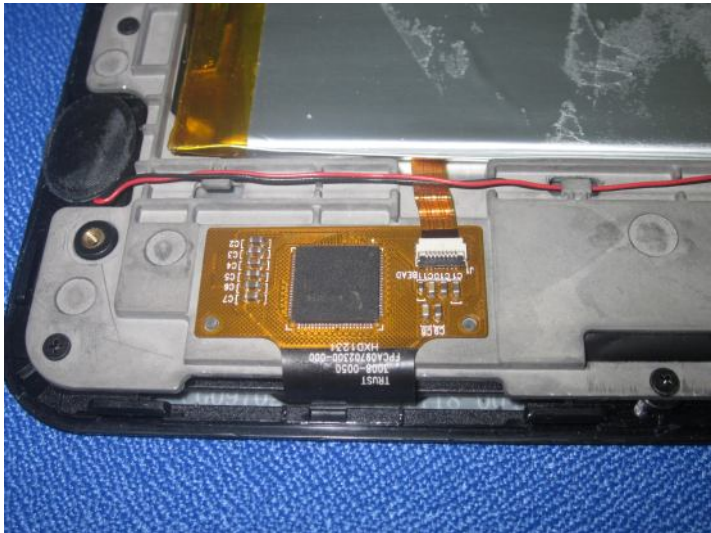
6. External and Internal Photos of the EUT

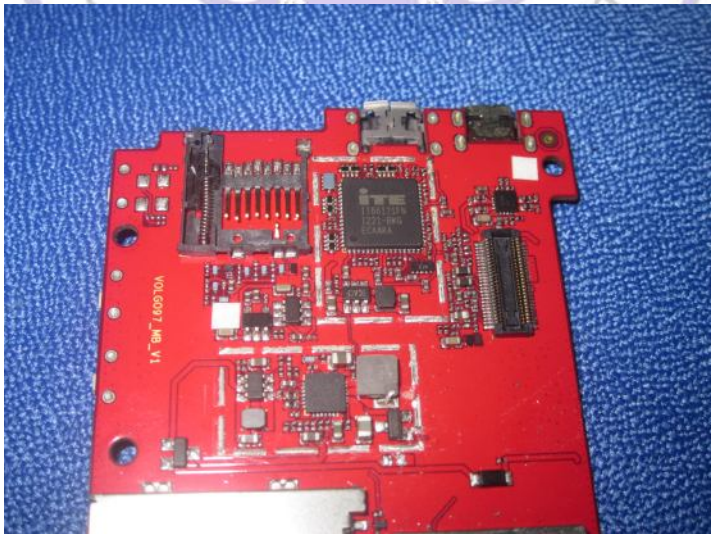
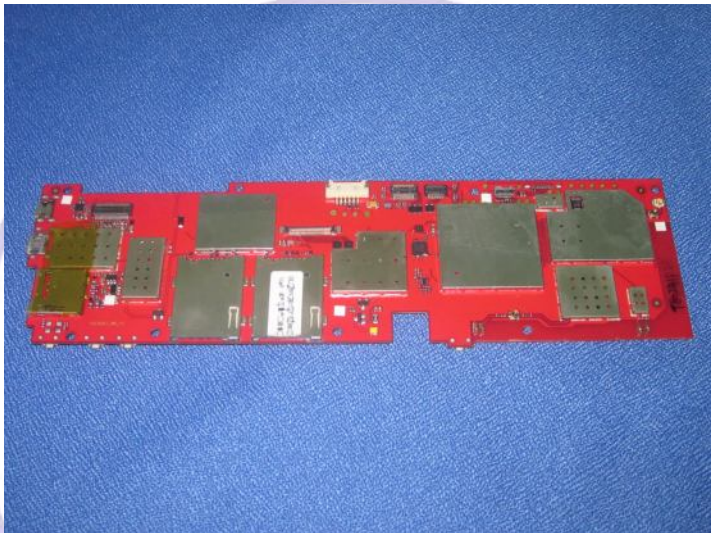
External Photos of EUT

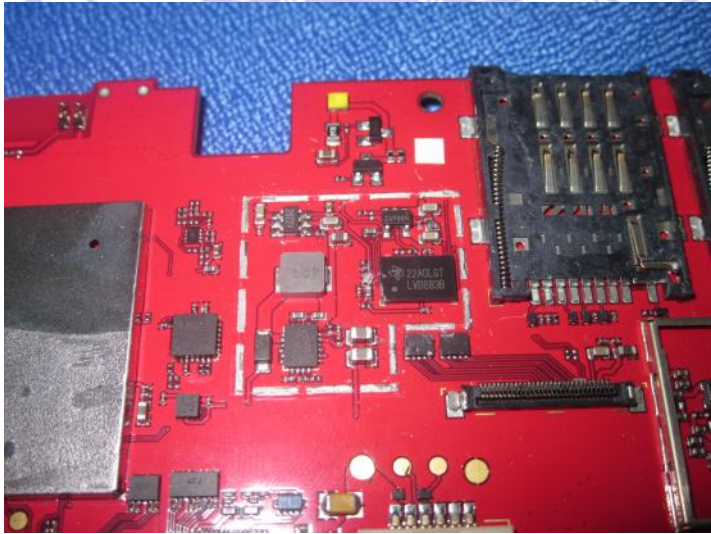
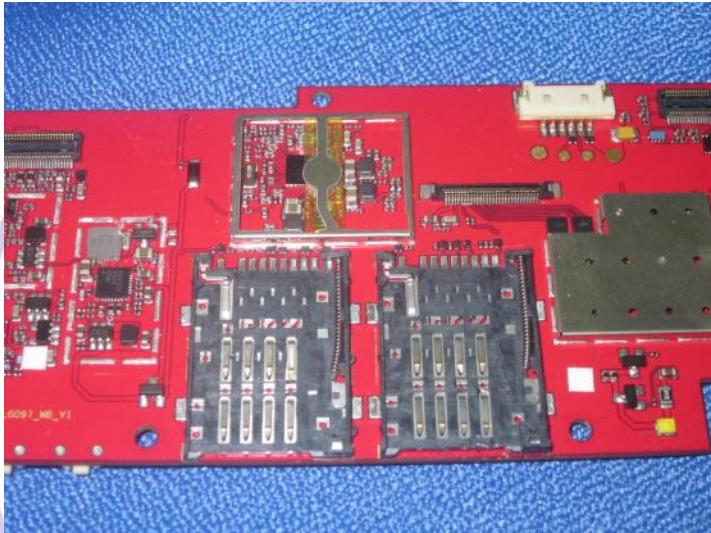
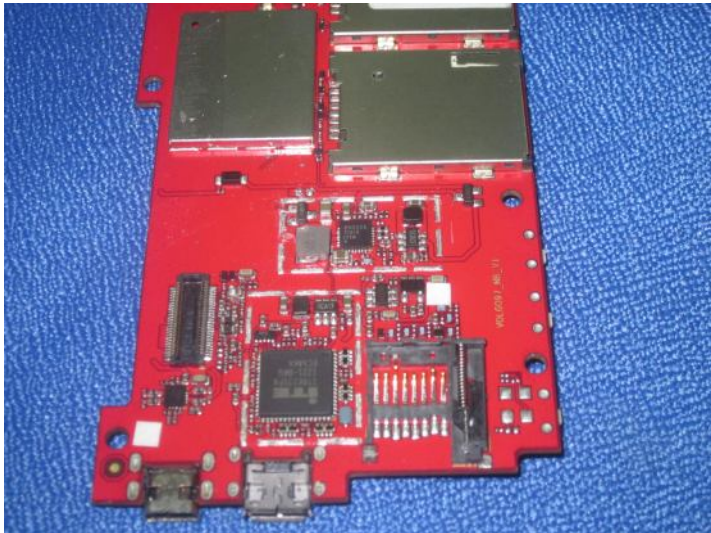


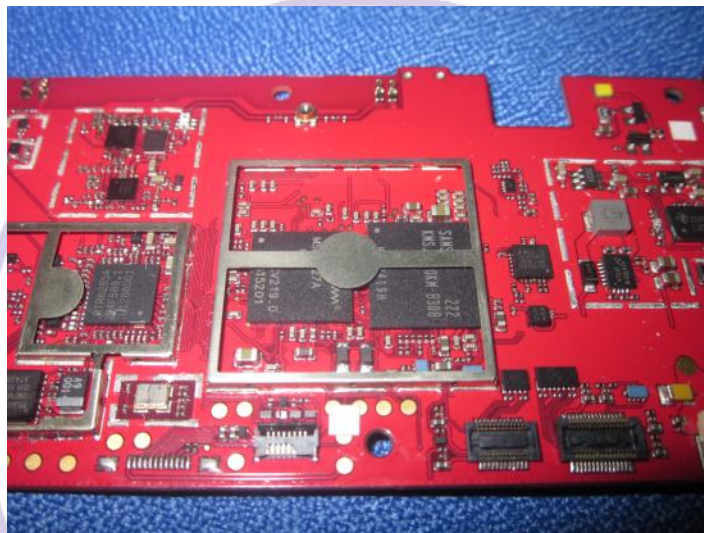


Internal Photos of EUT









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

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