APPLICATION FOR CERTIFICATION
On Behalf of

TP-LINK Technologies Co., Ltd.

54M Wireless PCI Adapter

Model Number: TL-WN350GD; TL-WN350G

FCC ID: TE7WN350GX

Prepared for : TP-LINK Technologies Co., Ltd.
Building 7, Second Part, Honghualing Industrial Zone,
Xili town, Nanshan, Shenzhen, P.R. China

Prepared By : Audix Technology (Shenzhen) Co., Ltd.
No. 6, Ke Feng Rd., 52 Block,
Shenzhen Science & Industrial Park,
Nantou, Shenzhen, Guangdong, China

Tel: (0755) 26639496

Report Number	:	ACS-F08479
Date of Test	:	Dec.11~22, 2008
Date of Report	:	Dec.30, 2008

TABLE OF CONTENTS

Description Page

TEST REPORT CERTIFICATION

Applicant	:	TP-LINK Technologies Co., Ltd.
Manufacturer	:	TP-LINK Technologies Co., Ltd.
EUT Description	:	54M Wireless PCI Adapter
FCC ID	:	TE7WN350GX

(A) MODEL NO. : TL-WN350GD; TL-WN350G

(B) SERIAL NO. : N/A

(C) POWER SUPPLY : DC 3.3V From PC

(D) TEST VOLTAGE : DC 3.3V From PC Input AC 120V/60Hz

Test Procedure Used:

FCC Rules and Regulations Part 15 Subpart C 2007

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C limits both radiated and conducted emissions.
The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

Date of Test : Dec.11~22, 2008

Prepared by : Edie Huang
Edie Huang / Assistant

Reviewer : Jamy Yu
Jamy Yu / Senior Engineer

信華科技(深圳)有限公司
Audix Technology (Shenzhen) Co., Ltd.
EMC 部門報告專用章
Stamp only for EMC Dept. Report
Signature: Ken Lu 1/6 09'

Approved & Authorized Signer :
Ken Lu / Deputy Manager

1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION		
Description of Test Item	**Standard**	**Results**
Power Line Conducted Emission Test	FCC Part 15: 15.207 ANSI C63.4: 2003 KDB558074	PASS
Radiated Emission Test	FCC Part 15: 15.209 ANSI C63.4: 2003 KDB558074	PASS
Band Edge Compliance Test	FCC Part 15: 15.247 KDB558074	PASS
Conducted spurious emissions test	FCC Part 15: 15.247 KDB558074	PASS
6dB Bandwidth Test	FCC Part 15: 15.247 KDB558074	PASS
Output Power Test	FCC Part 15: 15.247 KDB558074	PASS
Power Spectral Density Test	FCC Part 15: 15.247 KDB558074	PASS
MPE ESTIMATION	FCC Part 2: 2.1093	PASS
Antenna requirement	FCC Part 15: 15.203	PASS
N/A is an abbreviation for Not Applicable.		

2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Product name	:	54M Wireless PCI Adapter
Model Number	:	TL-WN350GD; TL-WN350G
		The difference between them are: TL-WN350G with fixed antenna and TL-WN350GD with detachable antenna. And this two types of antennas have the same gain and other characteristic. According to technical characteristic, this difference only influence radiated spurious emissions from 30MHz to 1GHz. So only the radiated spurious emissions from 30MHz to 1GHz were tested with two models, and the other items were only tested with TL-WN350GD.
FCC ID	:	TE7WN350GX
Operation frequency	:	IEEE 802.11b: 2412MHz—2462MHz IEEE 802.11g: 2412MHz—2462MHz
Channel Number	:	IEEE 802.11b/g: 11 Channels
Modulation Technology	:	IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK)
Data Rate	:	IEEE 802.11b: 11/5.5/2/1Mbps. IEEE 802.11g: 54/48/36/24/18/12/9/6Mbps.
Output power	:	22.32dBm(Maximum PK measured)
Antenna Assembly Gain	:	1.8dBi (maximum)
Applicant	:	TP-LINK Technologies Co., Ltd.
		Building 7, Second Part, Honghualing Industrial Zone, Xili town, Nanshan, Shenzhen, P.R. China
Manufacturer	:	TP-LINK Technologies Co., Ltd.
		Building 7, Second Part, Honghualing Industrial Zone, Xili town, Nanshan, Shenzhen, P.R. China
Date of Test	:	Dec.11~22, 2008
Date of Receipt	:	Dec.02, 2008
Sample Type	:	Prototype production

2.2.Test information

The test software "WN350GD.bat"was used to control EUT work in Continuous TX mode, and select test channel, wireless mode and data rate.

Tested mode, channel, and data rate information			
Mode	data rate (Mpbs)(see Note)	Channel	Frequency (MHz)
IEEE 802.11b	1	Low :CH1	2412
	1	Middle: CH6	2437
	1	High: CH11	2462
IEEE 802.11g	9	Low :CH1	2412
	9	Middle: CH6	2437
	9	High: CH11	2462
Note: According exploratory test, EUT will have maximum output power in those data rate. so those data rate were used for all test.			

2.3.Date rate VS power

Mode	Data rate(Mbps)	CH	Level (dBm)	Limit (dBm)
11b	1	CH6	20.96	**30**
	2	CH6	20.34	**30**
	5.5	CH6	20.33	**30**
	11	CH6	20.11	**30**
11g	6	CH6	19.45	**30**
	9	CH6	22.32	**30**
	12	CH6	21.23	**30**
	18	CH6	20.43	**30**
	24	CH6	22.01	**30**
	36	CH6	21.23	**30**
	48	CH6	21.45	**30**
	54	CH6	21.89	**30**
When IEEE 802.11b's data rate was 1Mbps; IEEE 802.11g's data rate was 6Mbps the EUT have maximum output power and all the test was performed in this data rate set.				

2.4.Tested Supporting System Details

2.4.1. PERSONAL COMPUTER

M/N	:	DCSM
S/N	:	GG8T12X
Manufacturer	:	DELL
Power Cord	:	Unshielded, Detachabled, 1.8m

2.4.2. MONITOR

EMC CODE	:	Test Monitor C
M/N	:	E772F
S/N	:	CN-02W486-64180-3CE-00LB
Manufacturer	:	Dell
Data Cable	:	Shielded, Undetachabled , 1.8m
Power cord	:	Unshielded, detachabled , 1.8m
FCC ID	:	By DoC

2.4.3. USB KEYBOARD

EMC CODE	:	ACS-EMC-K01R
M/N	:	SK-8125
Manufacturer	:	Dell
Data Cable	:	Shielded, Undetachabled, 2.0m Add core
FCC ID	:	By DoC
BSMI ID	:	R31302

2.4.4. USB MOUSE

EMC CODE	:	ACS-EMC-M01TA
M/N	:	M056UO
S/N	:	512024284
Manufacturer	:	Dell
Data Cable	:	Shielded, undetachabled, 1.8m
FCC ID	:	By DoC
BSMI ID	:	R41108

2.5.Test Facility

Site Description

Name of Firm	:	Audix Technology (Shenzhen) Co., Ltd. No. 6, Ke Feng Rd., 52 Block, Shenzhen Science & Industrial Park,Nantou, Shenzhen, Guangdong, China
3m Anechoic Chamber	:	Jun. 13, 2006 File on Federal Communication Commission Registration Number: 90454
3m & 10m Anechoic Chamber	:	Jan. 31, 2007 File on Federal Communication Commission Registration Number: 794232
EMC Lab.	:	Accredited by DATech, German Registration Number: DAT-P-091/99-01 Dec. 20, 2007 Accredited by NVLAP, USA NVLAP Code: 200372-0 Apr. 01, 2008

2.6.Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	MU	Remark
1.	Uncertainty for Conducted Emission Test	2.02dB	
2	Uncertainty for Radiation Emission test in 3m chamber	3.44 dB	Polarize: V
		3.96 dB	Polarize: H
3	Uncertainty for Radiation Emission test in 10m chamber	3.86dB	Distance: 10m Polarize: V
		4.18dB	Distance: 10m Polarize: H
		4.02dB	Distance: 3m Polarize: V
		4.36dB	Distance: 3m Polarize: H
4.	Uncertainty for Frequency measure	1×10^{-9}	
5.	Uncertainty for conducted power measure	0.34dB	

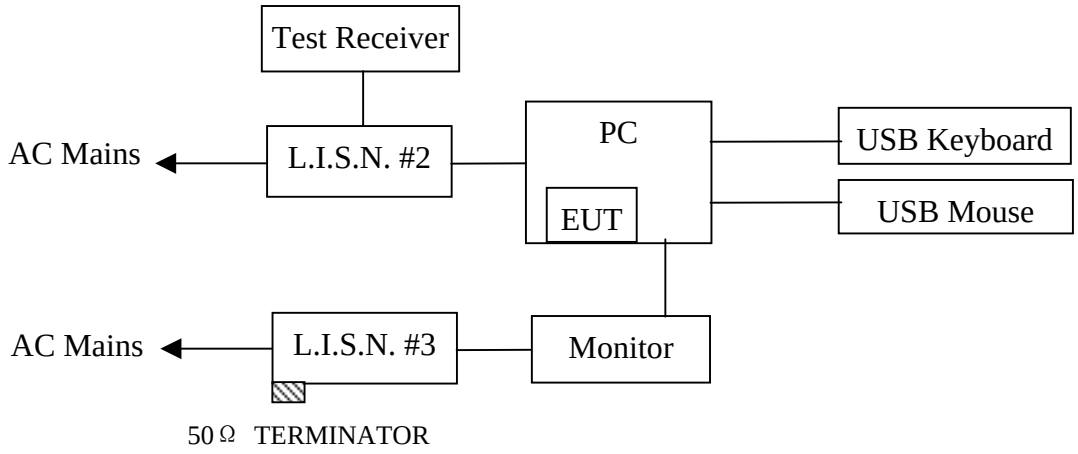
3. POWER LINE CONDUCTED EMISSION TEST

3.1.Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCI	100842	Oct.24, 08	1 Year
2.	L.I.S.N.#2	Kyoritsu	KNW-407	8-1636-1	May 10,08	1 Year
3.	L.I.S.N.#3	Kyoritsu	KNW-242C	8-1920-1	May 10,08	1 Year
4.	Terminator	Hubersuhner	50Ω	No. 1	May 10,08	1 Year
5.	RF Cable	Fujikura	3D-2W	LISN Cable 1#	Nov.10, 08	1/2 Year
6.	Coaxial Switch	Anritsu	MP59B	M55367	Nov.01, 08	1/2 Year
7.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	Nov.10, 08	1/2 Year

3.2.Block Diagram of Test Setup

3.2.1. Block diagram of connection between the EUT and simulators



(EUT: 54M Wireless PCI Adapter)

3.3.Power Line Conducted Emission Test Limits

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

3.4. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

3.4.1. 54M Wireless PCI Adapter (EUT)

Model Number : TL-WN350GD
Serial Number : N/A

3.4.2. Support Equipment : As Tested Supporting System Detail, in Section 2.3.

3.5. Operating Condition of EUT

3.5.1. Setup the EUT and simulator as shown as Section 3.2.

3.5.2. Turn on the power of all equipment.

3.5.3. PC run test software to control the EUT worked in test mode (Tx Mode) and measured it.

3.6. Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#3). Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2003 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESCI) is set at 10kHz.

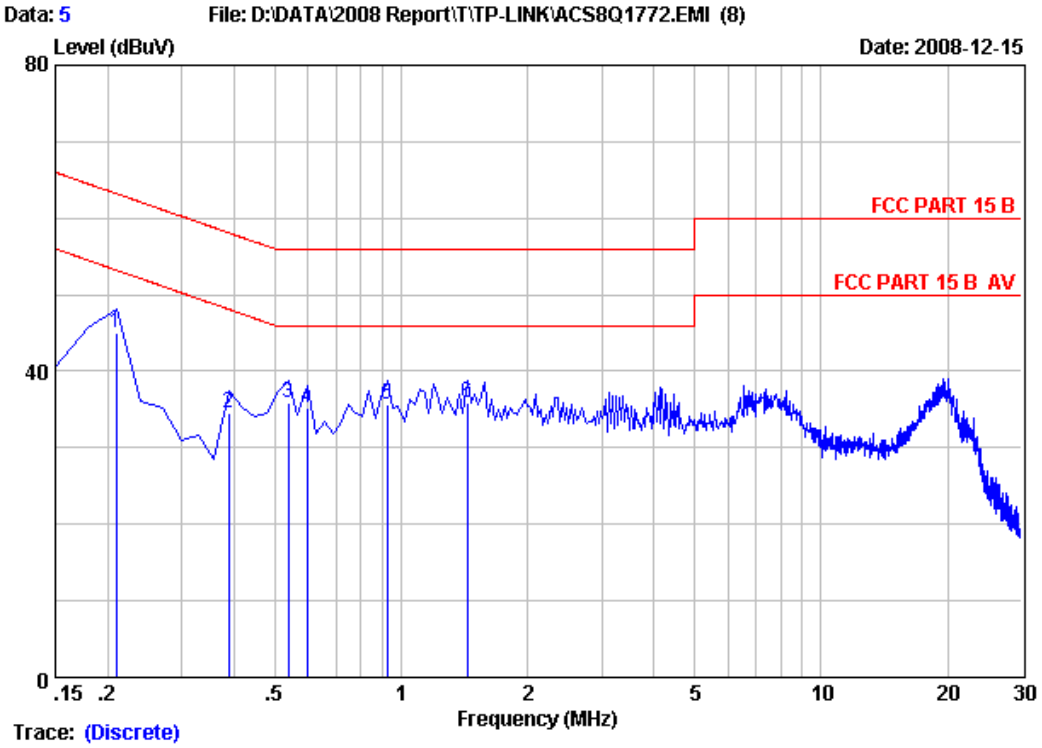
The frequency range from 150kHz to 30MHz is checked.

The test result are reported on Section 3.7.,

3.7. Power Line Conducted Emission Test Results

PASS. **(**All emissions not reported below are too low against the prescribed limits.)

NO.6 Ke Feng Road,Block 52,
Shenzhen Science&Industry Park
Nantou, Shenzhen,Guang dong, China.
Tel:+86-755-26639495
Fax:+86-755-26632877
Postcode:518057

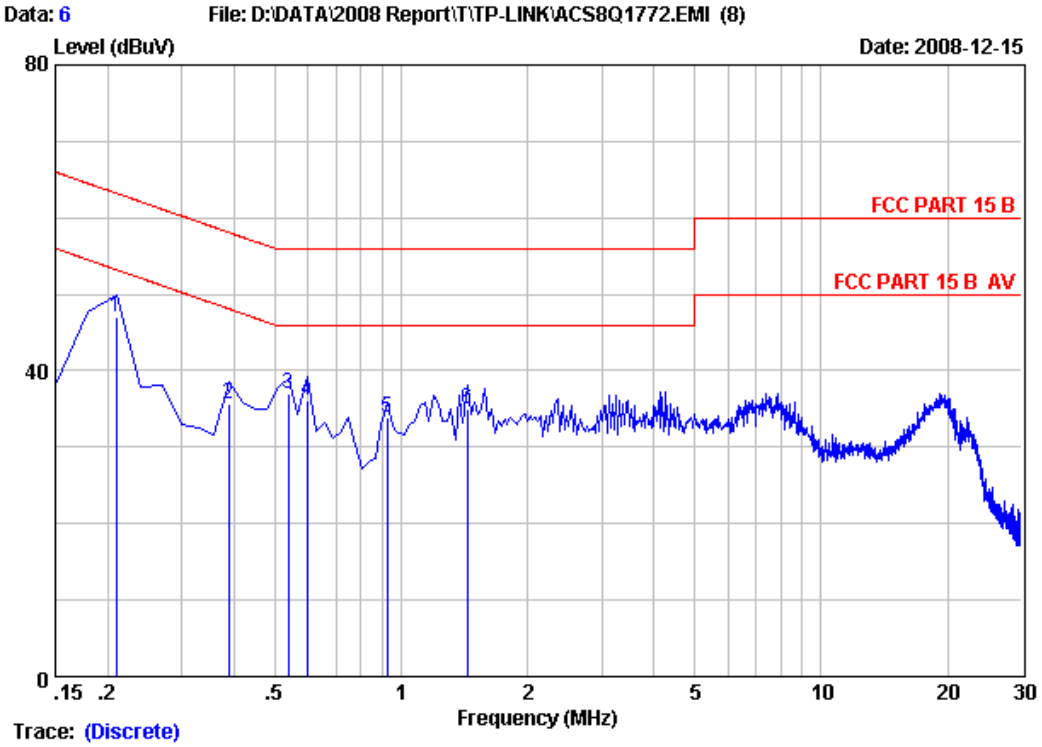


Site no :Audix No.1 Conduction Data no :5
Dis./Ant. :-- KNW407 1# VA LISN phase:
Limit :FCC PART 15 B
Env./Ins. :Temp:23'C Humi:54% Engineer :Sunny
EUT :54M Wireless PCI Adapter M/N:TL-WN350GD
Power Rating :DC 3.3V From PC input AC 120V/60Hz
Test Mode :Tx Mode
:

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.21	0.29	9.91	34.92	45.12	63.22	18.10	QP
2	0.39	0.23	9.88	24.41	34.52	58.09	23.57	QP
3	0.54	0.20	9.87	25.73	35.80	56.00	20.20	QP
4	0.60	0.20	9.87	25.11	35.18	56.00	20.82	QP
5	0.93	0.12	9.89	25.68	35.69	56.00	20.31	QP
6	1.43	0.10	9.90	25.83	35.83	56.00	20.17	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

NO.6 Ke Feng Road,Block 52,
Shenzhen Science&Industry Park
Nantou, Shenzhen,Guang dong, China.
Tel:+86-755-26639495
Fax:+86-755-26632877
Postcode:518057



Site no :Audix No.1 Conduction Data no :6
Dis./Ant. :-- KNW407 1# VB LISN phase:
Limit :FCC PART 15 B
Env./Ins. :Temp:23'C Humi:54% Engineer :Sunny
EUT :54M Wireless PCI Adapter M/N:TL-WN350GD
Power Rating :DC 3.3V From PC input AC 120V/60Hz
Test Mode :Tx Mode
:

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.21	0.11	9.91	36.97	46.99	63.22	16.23	QP
2	0.39	0.17	9.88	25.55	35.60	58.09	22.49	QP
3	0.54	0.18	9.87	26.90	36.95	56.00	19.05	QP
4	0.60	0.15	9.87	26.10	36.12	56.00	19.88	QP
5	0.93	0.10	9.89	23.97	33.96	56.00	22.04	QP
6	1.43	0.06	9.90	25.11	35.07	56.00	20.93	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

4. RADIATED EMISSION TEST

4.1.Test Equipment

Frequency rang: 30~1000MHz

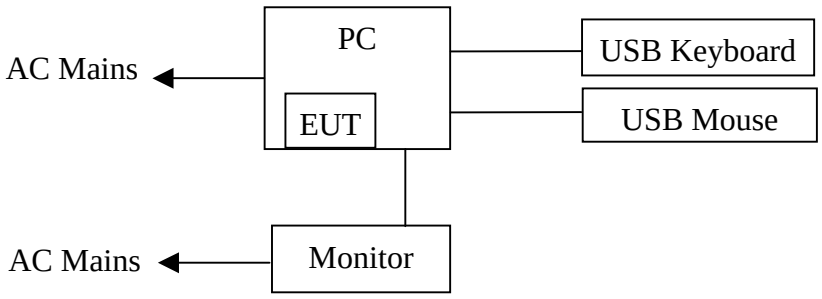
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber	AUDIX	N/A	N/A	Jun.09,08	1/2 Year
2.	EMI Spectrum	Agilent	E7403A	MY42000106	May 10, 08	1 Year
3.	Test Receiver	Rohde & Schwarz	ESVS20	830350/005	May 10, 08	1 Year
4.	Amplifier	HP	8447D	2648A04738	Jul.08.08	1/2 Year
5.	Bilog Antenna	Schaffner	CBL6112D	25237	Feb.21, 08	1 Year
6.	RF Cable	JINGCHENG	KLMR400	3# Chamber No.1	Jul.08.08	1/2 Year
7.	RF Cable	JINGCHENG	JBY400	3# Chamber No.2	Jul.08.08	1/2 Year
8.	RF Cable	JINGCHENG	JBY400	3# Chamber No.3	Jul.08.08	1/2 Year
9.	RF Cable	JINGCHENG	JBY400	3# Chamber No.4	Jul.08.08	1/2 Year
10.	Coaxial Switch	Anritsu	MP59B	M73989	Jul.08.08	1/2 Year

Frequency rang: above 1000MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	May 10, 08	1 Year
2.	Amp	HP	8449B	3008A08495	Oct.24, 08	1 Year
3.	Antenna	EMCO	3115	9607-4877	May 27, 08	1.5 Year
4.	Antenna	EMCO	3116	6088	May.27,08	1.5 Year
5.	RF Cable	Hubersuhner	SUCOFLEX 102	28620/2	May,28, 08	1 Year
6.	RF Cable	Hubersuhner	SUCOFLEX 102	271471/4	May,28, 08	1 Year
7.	RF Cable	Hubersuhner	SUCOFLEX 102	29086/2	May,28, 08	1 Year

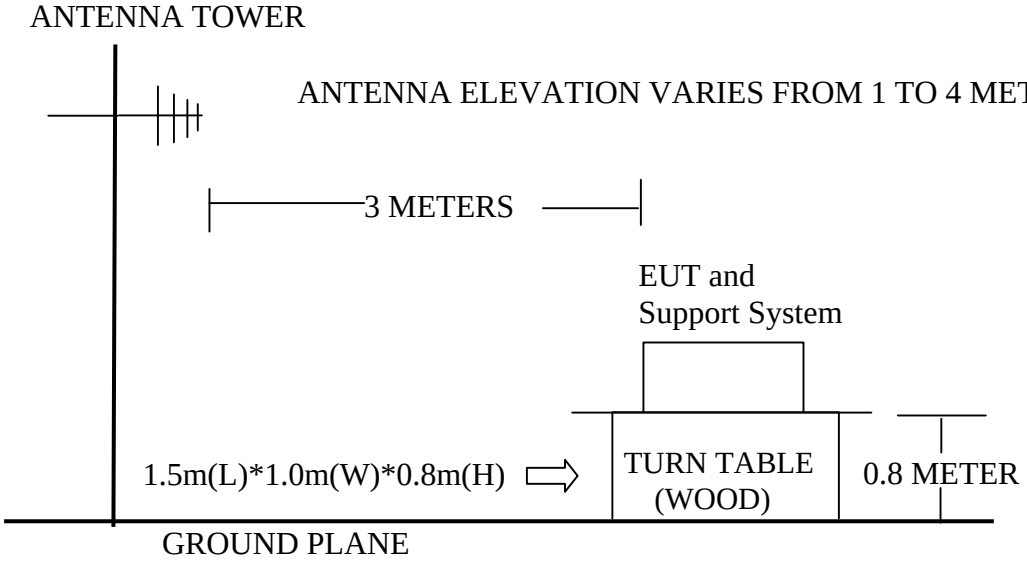
4.2.Block Diagram of Test Setup

4.2.1. Block diagram of connection between the EUT and simulators



(EUT: 54M Wireless PCI Adapter)

4.2.2. In Anechoic Chamber



4.3. Radiated Emission Limit

4.3.1. 15.209 limits

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

Remark： (1) Emission level dBμV = 20 log Emission level μV/m

(2) The smaller limit shall apply at the cross point between two frequency bands.

(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

4.3.2. 15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	([2])

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

4.4. EUT Configuration on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

4.4.1. 54M Wireless PCI Adapter (EUT)

Model Number : TL-WN350GD
Serial Number : N/A

4.4.2. Support Equipment : As Tested Supporting System Detail, in Section 2.3.

4.5. Operating Condition of EUT

4.5.1. Setup the EUT and simulator as shown as Section 4.2.

4.5.2. Turn on the power of all equipment.

4.5.3. Notebook run test software to control the EUT worked in test mode (Tx Mode) and measured it.

4.6. Test Procedure

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it work normally, we use a keyboard test soft ware, let EUT working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the EMI test receiver (R&S ESVS20) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 1MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

The frequency range from 30MHz to 10^{th} harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25 GHz, So the radiated emissions from 18GHz to 25GHz were not record.

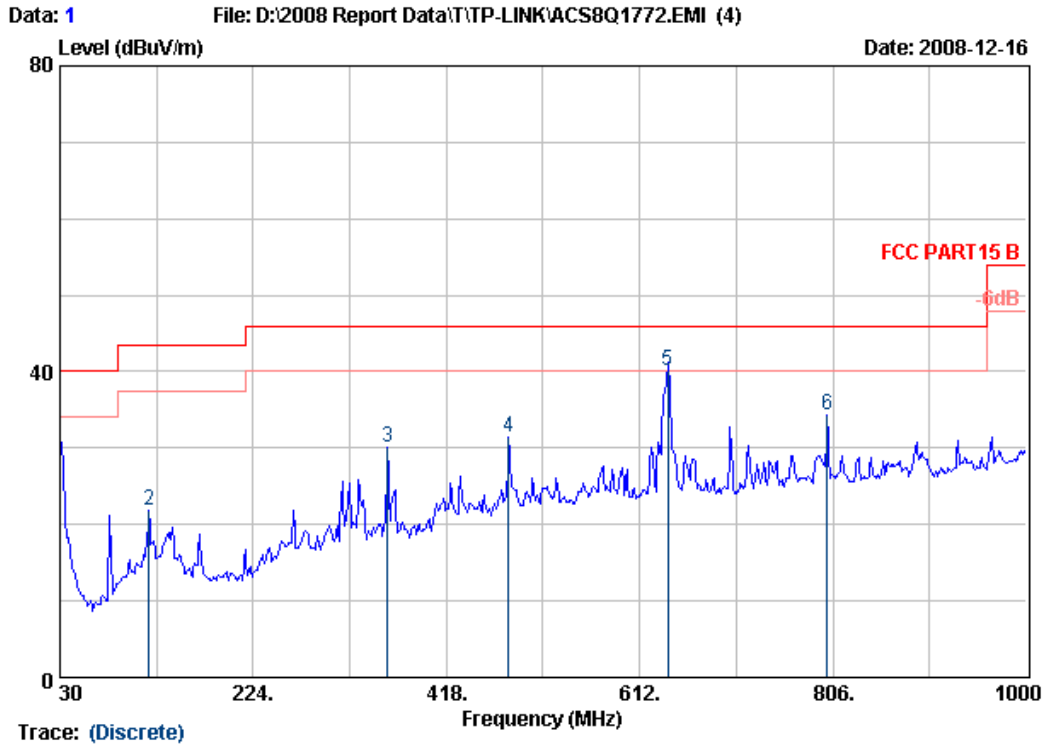
4.7. Radiated Emission Test Results

PASS.

All the emissions from 30MHz to 25 GHz were comply with 15.209 limits.

Frequency: 30MHz~1GHz
M/N: TL-WN350GD

No.6,Ke Feng Road,Block 52,
Shenzhen Science&Industry Park
Nantou Shenzhen,Guangdong,China
Tel:+86-755-26639495
Fax:+86-755-26632877
Postcode:518057



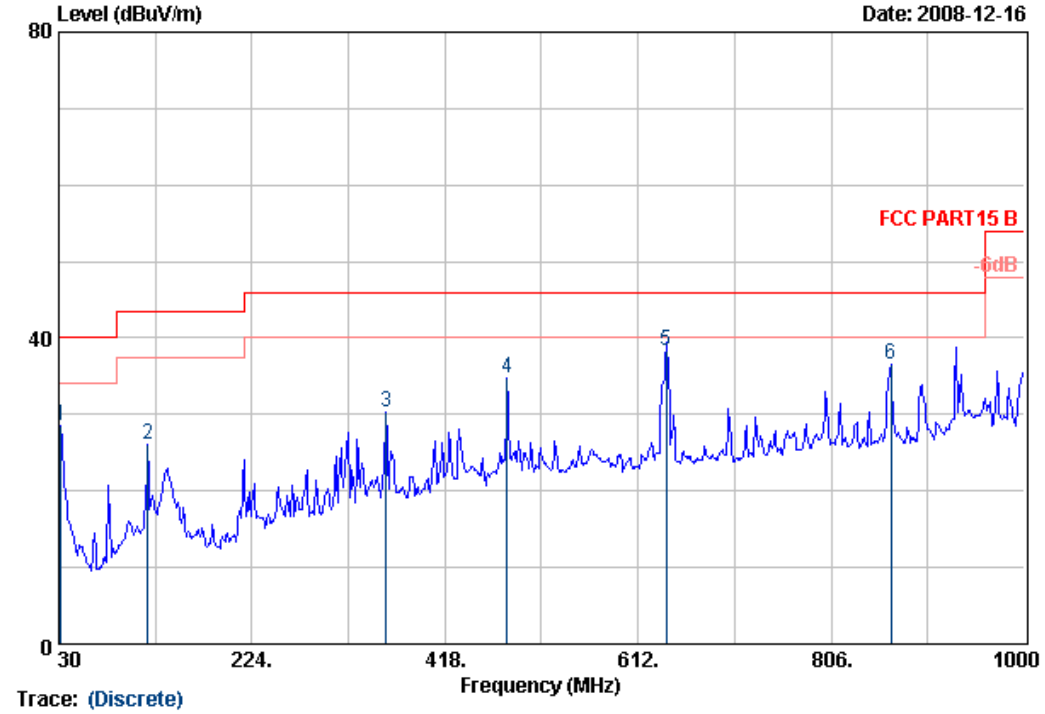
Site no. : AUDIX 3m chamber Data no. : 1
Dis. / Ant. : 3m CBL6112D Ant. pol. : HORIZONTAL
Limit : FCC PART15 B
Env. / Ins. : 25.5*C/55% Engineer : Sunny
EUT : 54M Wireless PCI Adapter M/N:TL-WN350GD
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test Mode : Tx Mode

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	30.00	19.51	0.47	11.17	31.15	40.00	8.85	QP
2	119.24	13.10	1.02	7.77	21.89	43.50	21.61	QP
3	358.83	14.47	2.05	13.64	30.16	46.00	15.84	QP
4	480.08	17.60	2.45	11.47	31.52	46.00	14.48	QP
5	640.13	18.88	3.07	18.18	40.13	46.00	5.87	QP
6	800.18	19.51	3.52	11.37	34.40	46.00	11.60	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6,Ke Feng Road,Block 52,
Shenzhen Science&Industry Park
Nantou Shenzhen,Guangdong,China
Tel:+86-755-26639495
Fax:+86-755-26632877
Postcode:518057

Data: 2 File: D:\2008 Report Data\T\TP-LINK\ACS8Q1772.EMI (4)



Trace: (Discrete)

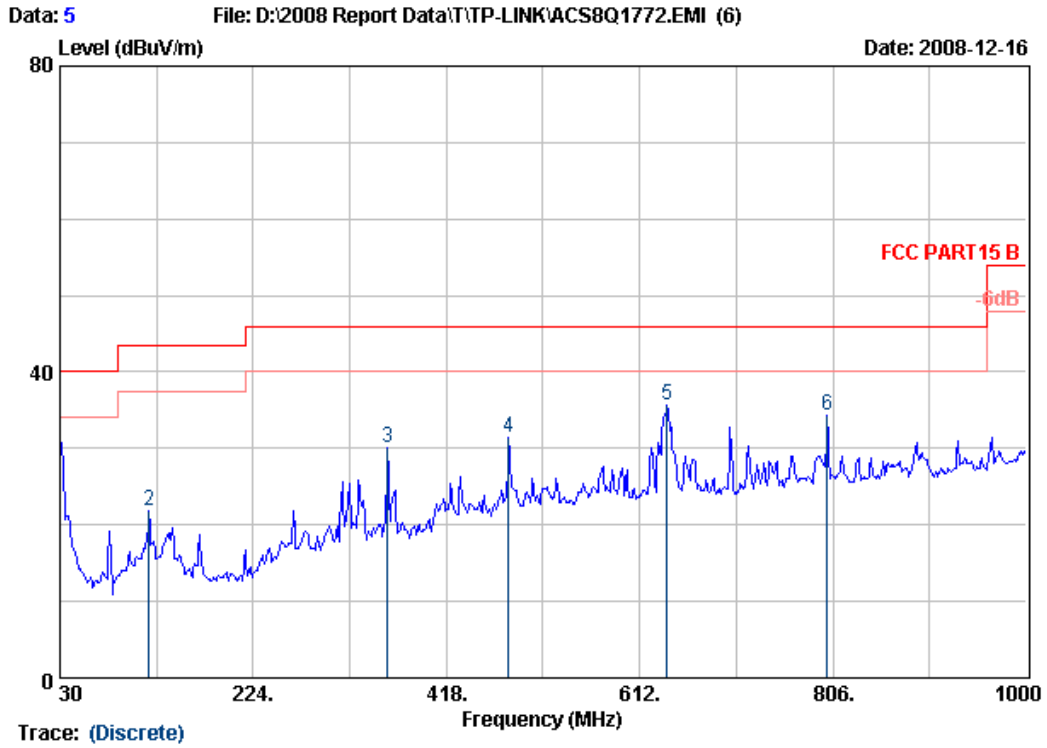
Site no. : AUDIX 3m chamber Data no. : 2
Dis. / Ant. : 3m CBL6112D Ant. pol. : VERTICAL
Limit : FCC PART15 B
Env. / Ins. : 25.5*C/55% Engineer : Sunny
EUT : 54M Wireless PCI Adapter M/N:TL-WN350GD
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test Mode : Tx Mode

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	31.94	18.36	0.49	9.78	28.63	40.00	11.37	QP
2	119.24	13.10	1.02	11.88	26.00	43.50	17.50	QP
3	358.83	14.47	2.05	13.81	30.33	46.00	15.67	QP
4	480.08	17.60	2.45	14.71	34.76	46.00	11.24	QP
5	640.13	18.88	3.07	16.41	38.36	46.00	7.64	QP
6	866.14	20.08	3.73	12.77	36.58	46.00	9.42	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

M/N: TL-WN350G

No.6,Ke Feng Road,Block 52,
Shenzhen Science&Industry Park
Nantou Shenzhen,Guangdong,China
Tel:+86-755-26639495
Fax:+86-755-26632877
Postcode:518057

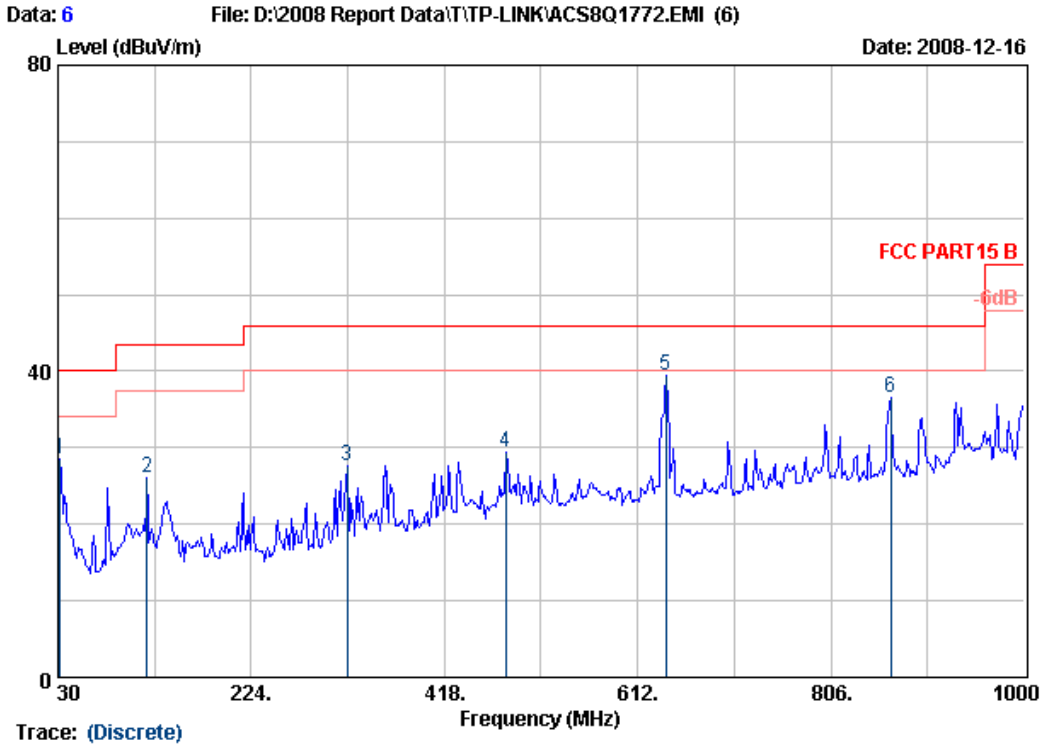



```
Site no.      : AUDIX 3m chamber            Data no.   : 5
Dis. / Ant.   : 3m   CBL6112D               Ant. pol.  : HORIZONTAL
Limit         : FCC PART15 B
Env. / Ins.   : 25.5*C/55%                  Engineer   : Sunny
EUT           : 54M Wireless PCI Adapter  M/N:TL-WN350G
Power Rating  : DC 3.3V From PC input AC 120V/60Hz
Test Mode     : Tx Mode
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	30.00	19.51	0.47	11.17	31.15	40.00	8.85	QP
2	119.24	13.10	1.02	7.77	21.89	43.50	21.61	QP
3	358.83	14.47	2.05	13.64	30.16	46.00	15.84	QP
4	480.08	17.60	2.45	11.47	31.52	46.00	14.48	QP
5	639.16	18.87	3.07	13.76	35.70	46.00	10.30	QP
6	800.18	19.51	3.52	11.37	34.40	46.00	11.60	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6,Ke Feng Road,Block 52,
Shenzhen Science&Industry Park
Nantou Shenzhen,Guangdong,China
Tel:+86-755-26639495
Fax:+86-755-26632877
Postcode:518057



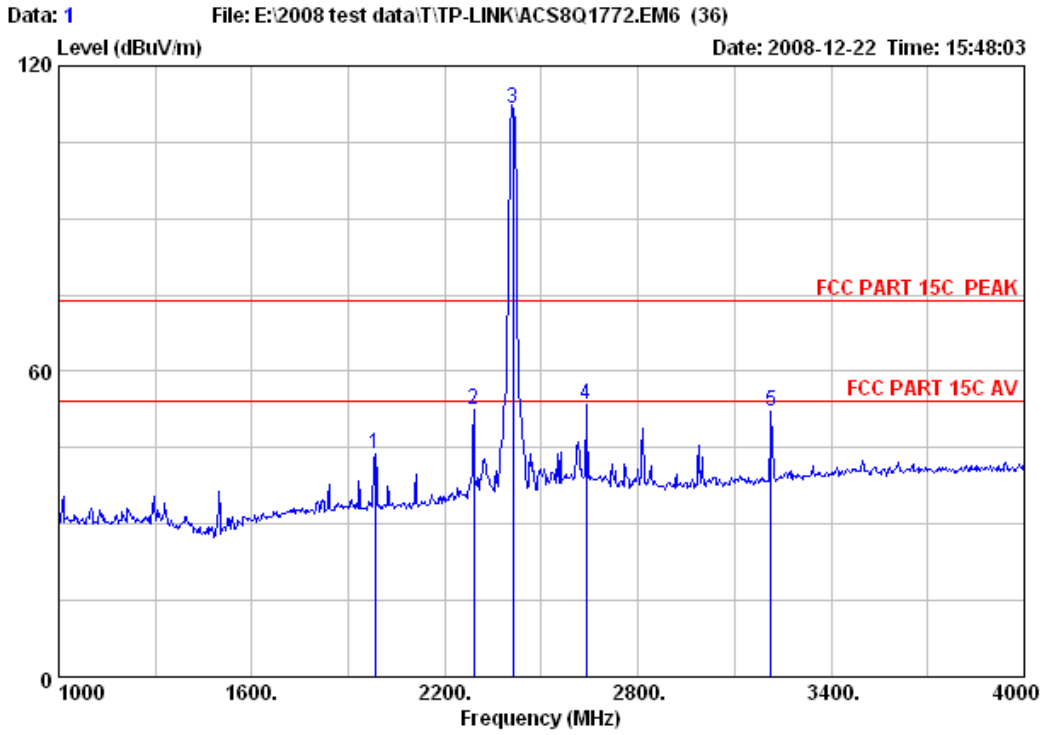
Site no. : AUDIX 3m chamber Data no. : 6
Dis. / Ant. : 3m CBL6112D Ant. pol. : VERTICAL
Limit : FCC PART15 B
Env. / Ins. : 25.5*C/55% Engineer : Sunny
EUT : 54M Wireless PCI Adapter M/N:TL-WN350G
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test Mode : Tx Mode

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	31.94	18.36	0.49	9.78	28.63	40.00	11.37	QP
2	119.24	13.10	1.02	11.88	26.00	43.50	17.50	QP
3	320.03	13.98	1.90	11.82	27.70	46.00	18.30	QP
4	479.11	17.59	2.45	9.41	29.45	46.00	16.55	QP
5	640.13	18.88	3.07	17.41	39.36	46.00	6.64	QP
6	866.14	20.08	3.73	12.77	36.58	46.00	9.42	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Frequency: 1GHz~18GHz

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

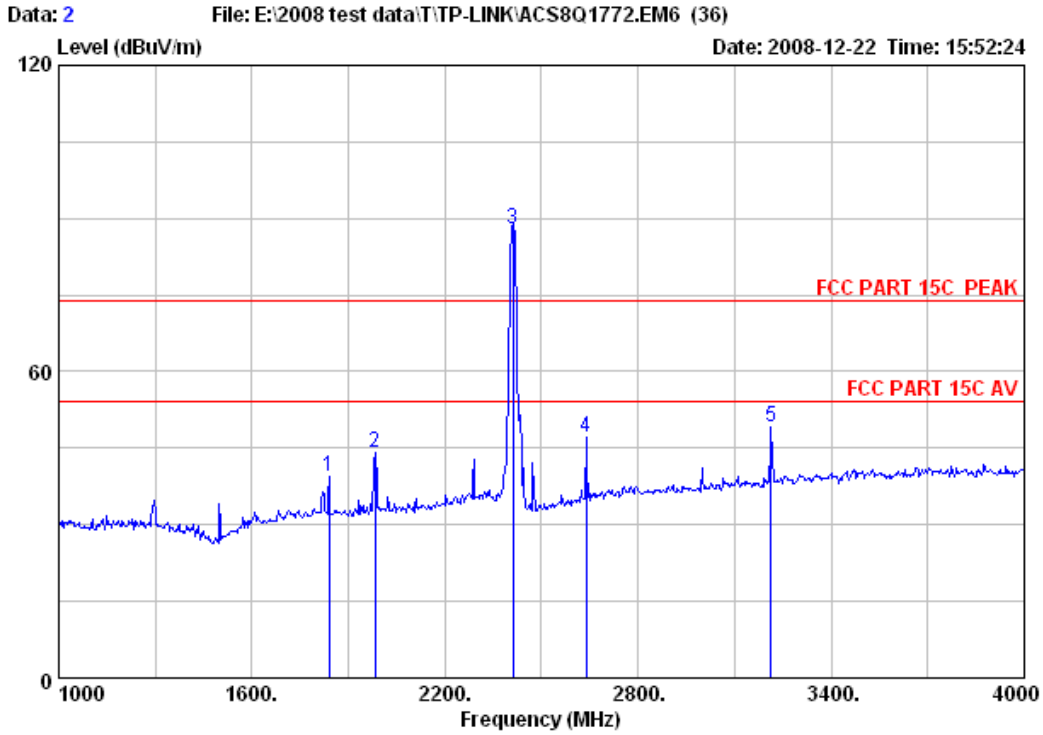


Site no. : 3# Chamber Data no. : 1
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH1:2412MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1984.000	27.83	6.16	36.08	45.85	43.76	74.00	30.24	Peak
2	2290.000	28.31	6.61	36.02	53.70	52.60	74.00	21.40	Peak
3	2412.000	28.48	6.73	35.95	112.23	111.49	74.00	-37.49	Peak
4	2638.000	29.03	7.09	35.97	53.23	53.38	74.00	20.62	Peak
5	3214.000	30.78	8.13	35.69	48.79	52.01	74.00	21.99	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,Bl;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

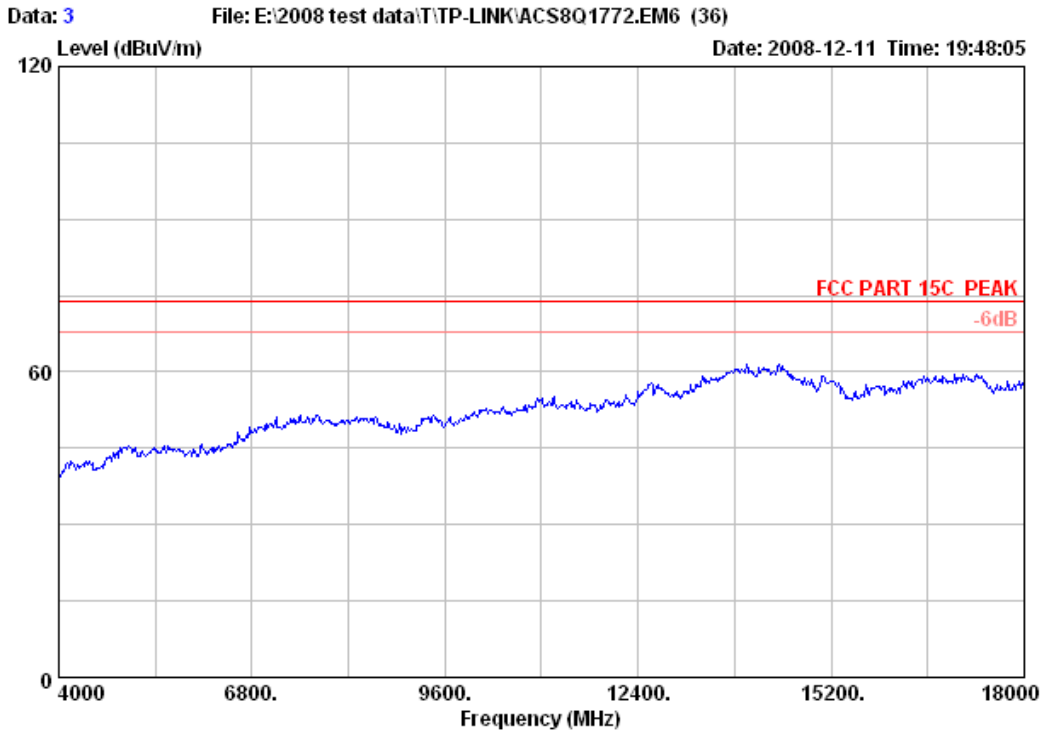


Site no. : 3# Chamber Data no. : 2
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH1:2412MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1840.000	27.23	5.86	36.34	42.66	39.41	74.00	34.59	Peak
2	1984.000	27.83	6.16	36.08	46.31	44.22	74.00	29.78	Peak
3	2412.000	28.48	6.73	35.95	88.79	88.05	74.00	-14.05	Peak
4	2638.000	29.03	7.09	35.97	47.14	47.29	74.00	26.71	Peak
5	3214.000	30.78	8.13	35.69	46.05	49.27	74.00	24.73	Peak

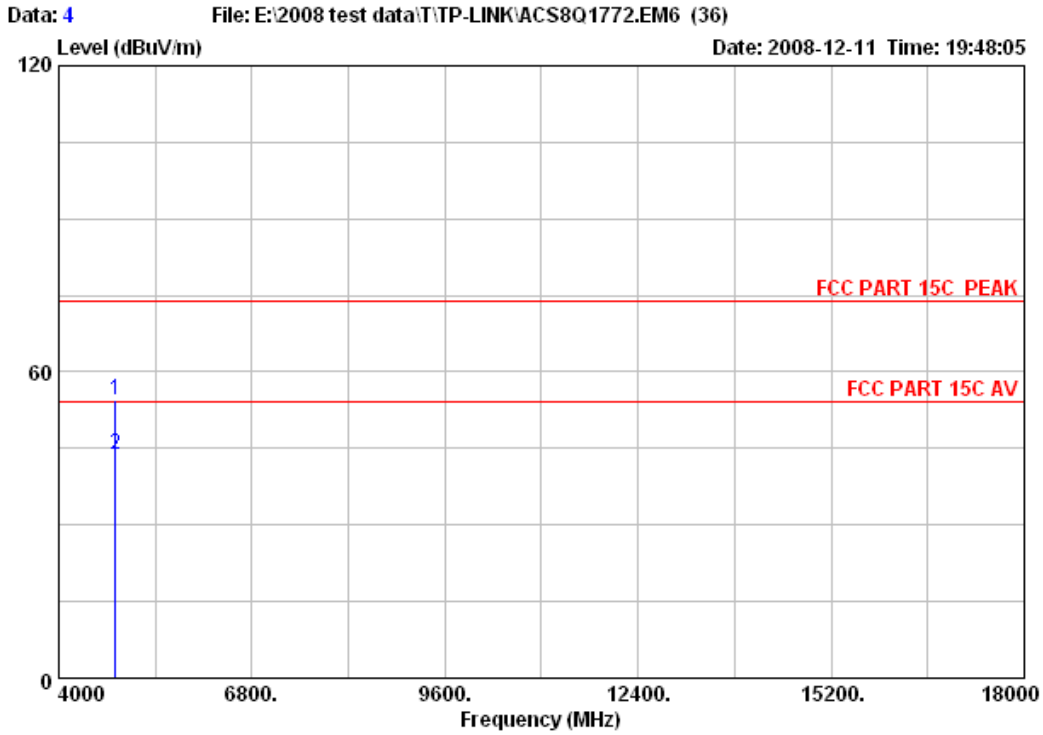
Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,Blick 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057




```
Site no.      : 3# Chamber              Data no.   : 3
Dis. / Ant.   : 3m   3115               Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer   : Sunny
EUT           : 54M Wireless PCI Adapter
Power Rating  : DC 3.3V From PC input AC 120V/60Hz
Test mode     : IEEE802.11b  CH1:2412MHz  Tx
Memo          : M/N:TL-WN350GD
```

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

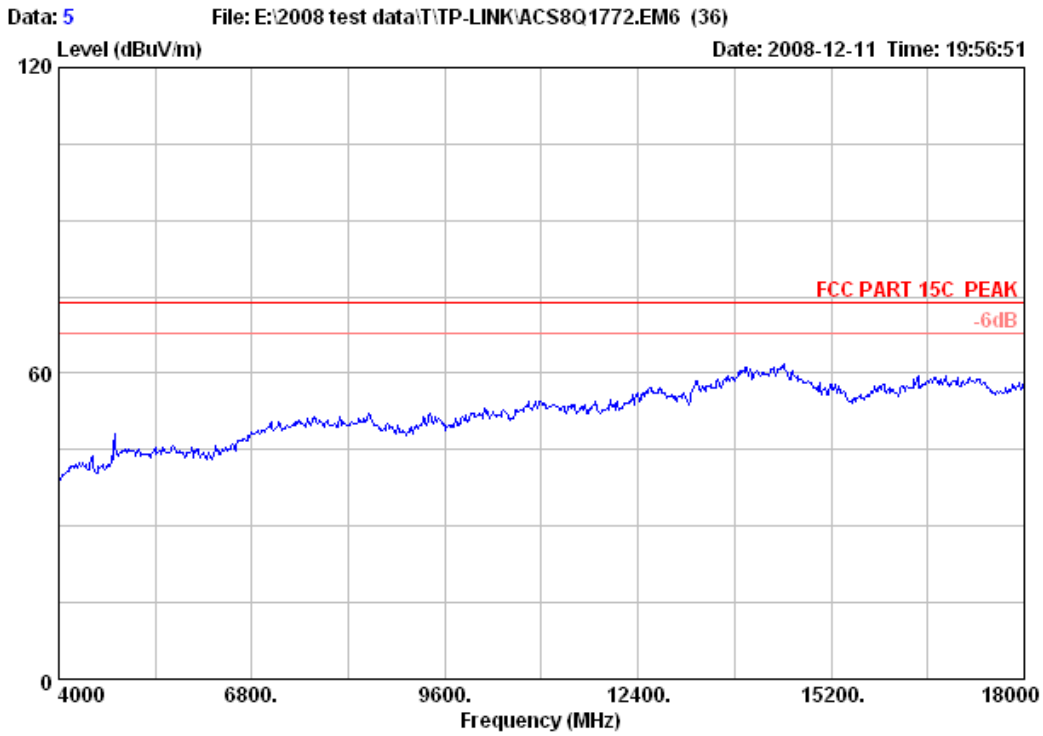


Site no. : 3# Chamber Data no. : 4
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH1:2412MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	34.47	10.55	35.20	44.56	54.38	74.00	19.62	Peak
2	4824.000	34.47	10.55	35.20	33.92	43.74	54.00	10.26	Average

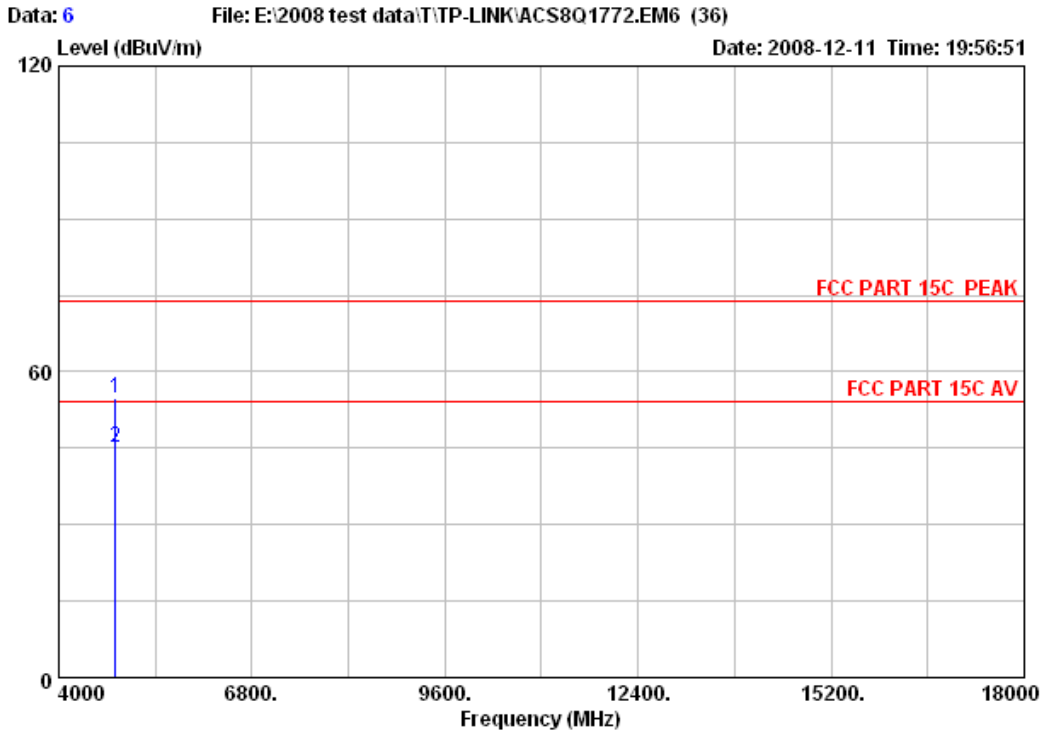
Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057




```
Site no.      : 3# Chamber              Data no.   : 5
Dis. / Ant.   : 3m   3115               Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer   : Sunny
EUT           : 54M Wireless PCI Adapter
Power Rating  : DC 3.3V From PC input AC 120V/60Hz
Test mode     : IEEE802.11b  CH1:2412MHz  Tx
Memo          : M/N:TL-WN350GD
```

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

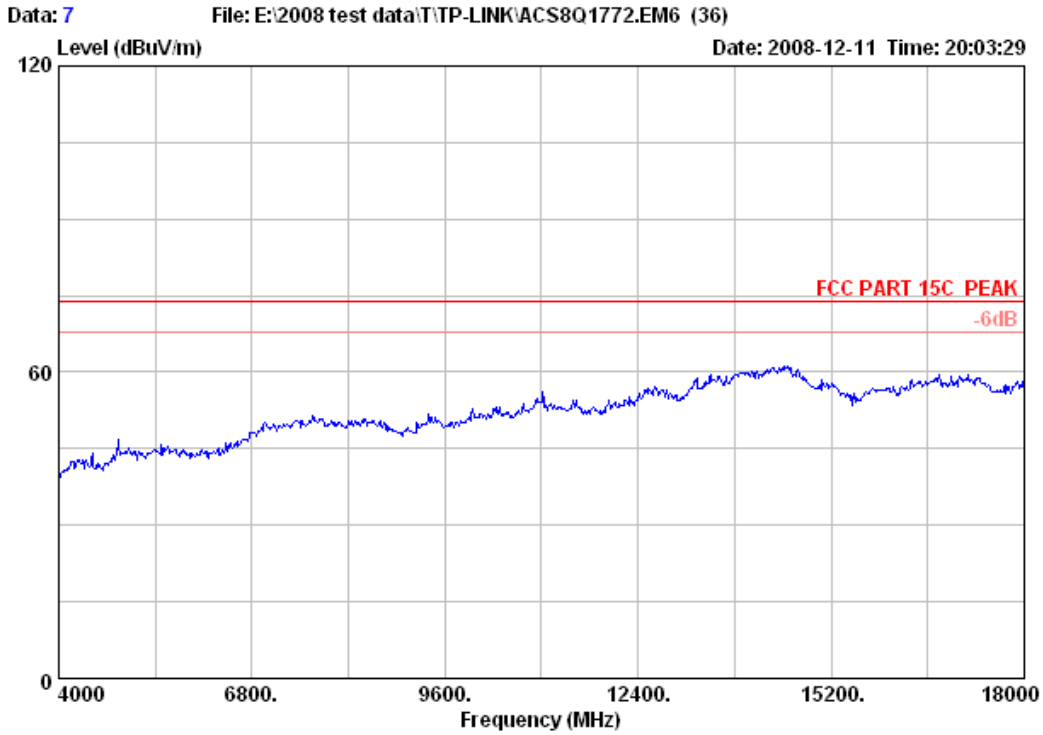


Site no. : 3# Chamber Data no. : 6
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH1:2412MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	34.47	10.55	35.20	45.10	54.92	74.00	19.08	Peak
2	4824.000	34.47	10.55	35.20	35.18	45.00	54.00	9.00	Average

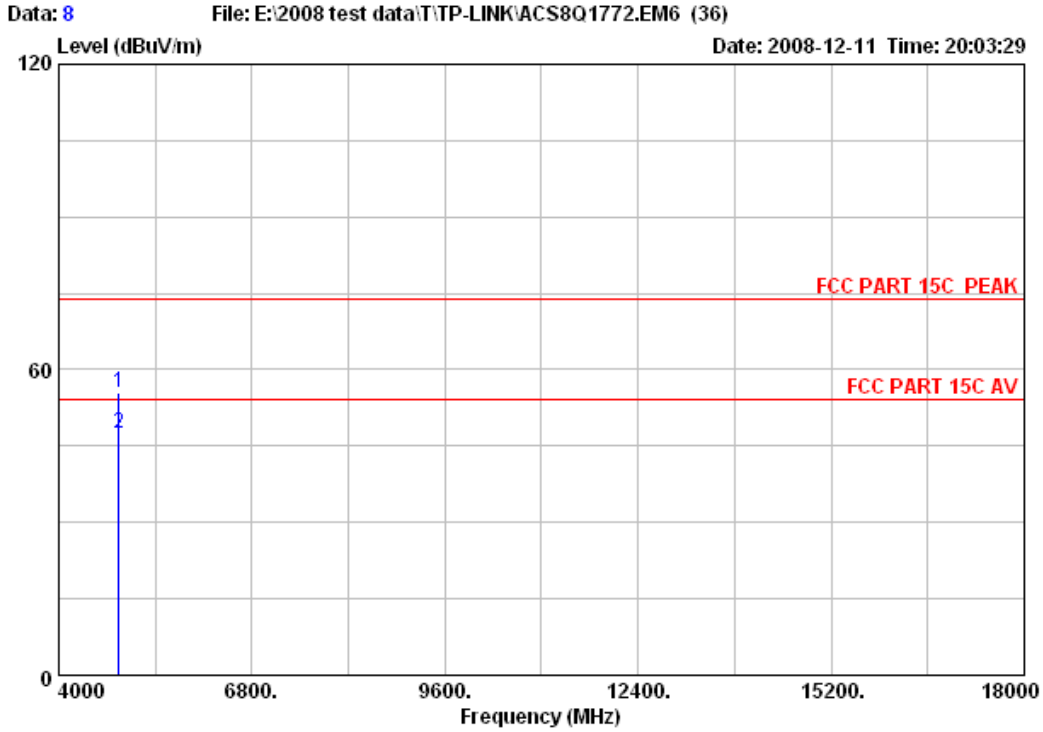
Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057




```
Site no.      : 3# Chamber                Data no.   : 7
Dis. / Ant.   : 3m   3115                 Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Sunny
EUT           : 54M Wireless PCI Adapter
Power Rating  : DC 3.3V From PC input AC 120V/60Hz
Test mode     : IEEE802.11b  CH6:2437MHz  Tx
Memo          : M/N:TL-WN350GD
```

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

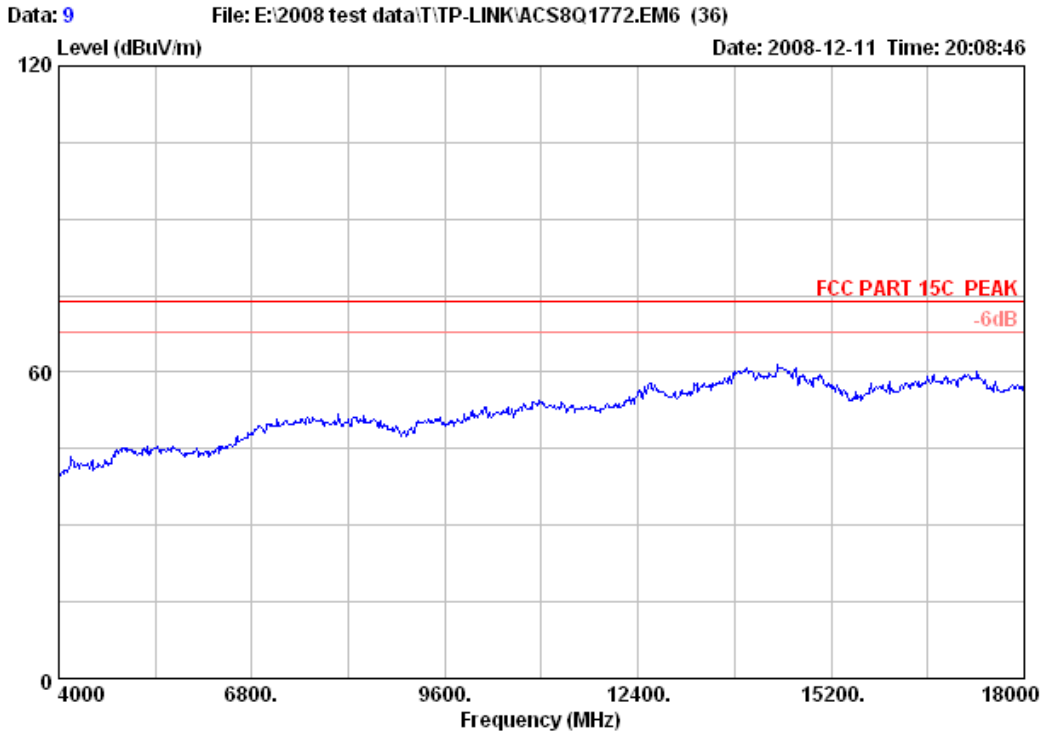


Site no. : 3# Chamber Data no. : 8
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH6:2437MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	34.78	10.56	35.13	45.44	55.65	74.00	18.35	Peak
2	4874.000	34.78	10.56	35.13	37.28	47.49	54.00	6.51	Average

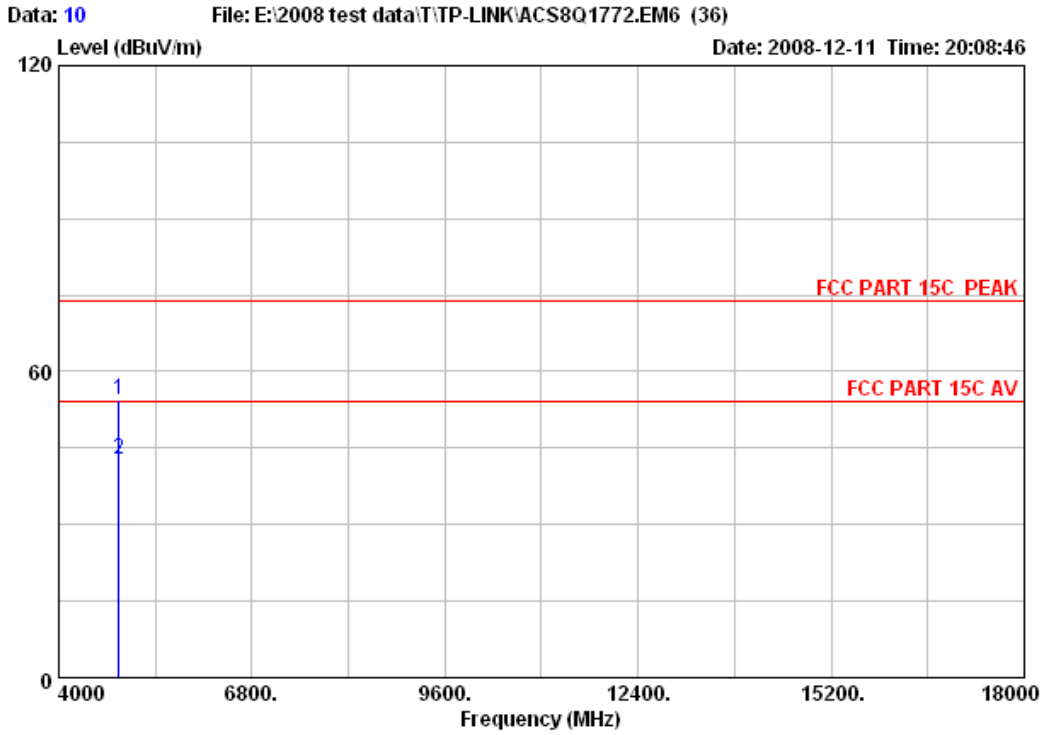
Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057




```
Site no.      : 3# Chamber              Data no.   : 9
Dis. / Ant.   : 3m   3115               Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer   : Sunny
EUT           : 54M Wireless PCI Adapter
Power Rating  : DC 3.3V From PC input AC 120V/60Hz
Test mode     : IEEE802.11b  CH6:2437MHz  Tx
Memo          : M/N:TL-WN350GD
```

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

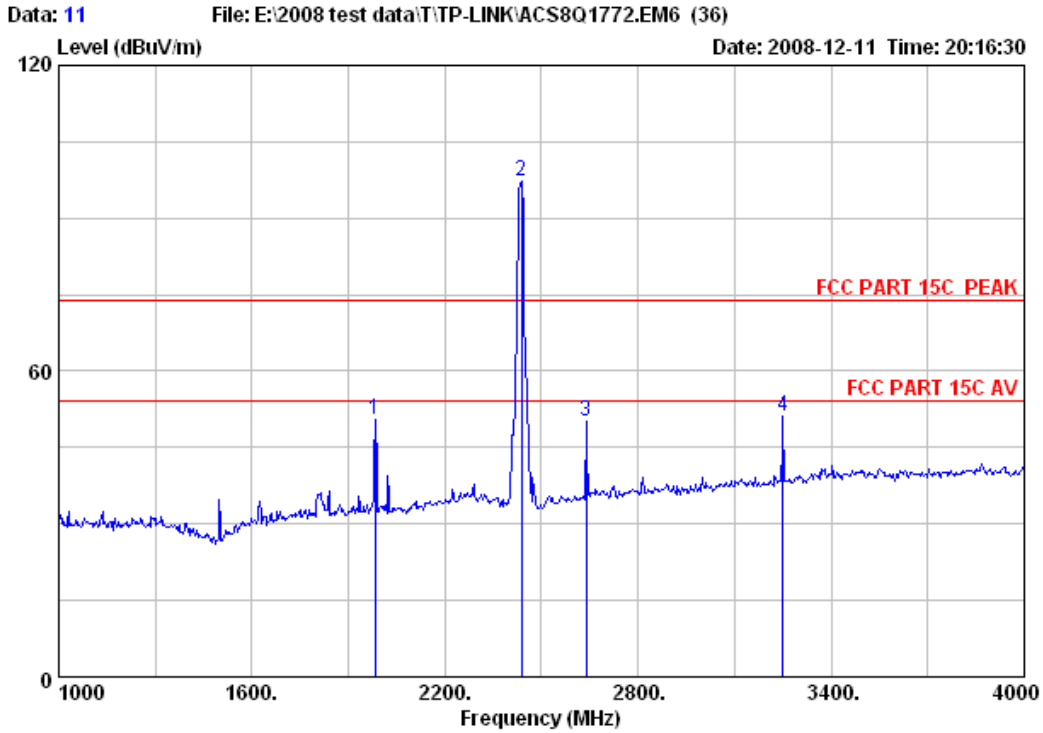


Site no. : 3# Chamber Data no. : 10
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH6:2437MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	34.78	10.56	35.13	44.20	54.41	74.00	19.59	Peak
2	4874.000	34.78	10.56	35.13	32.43	42.64	54.00	11.36	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

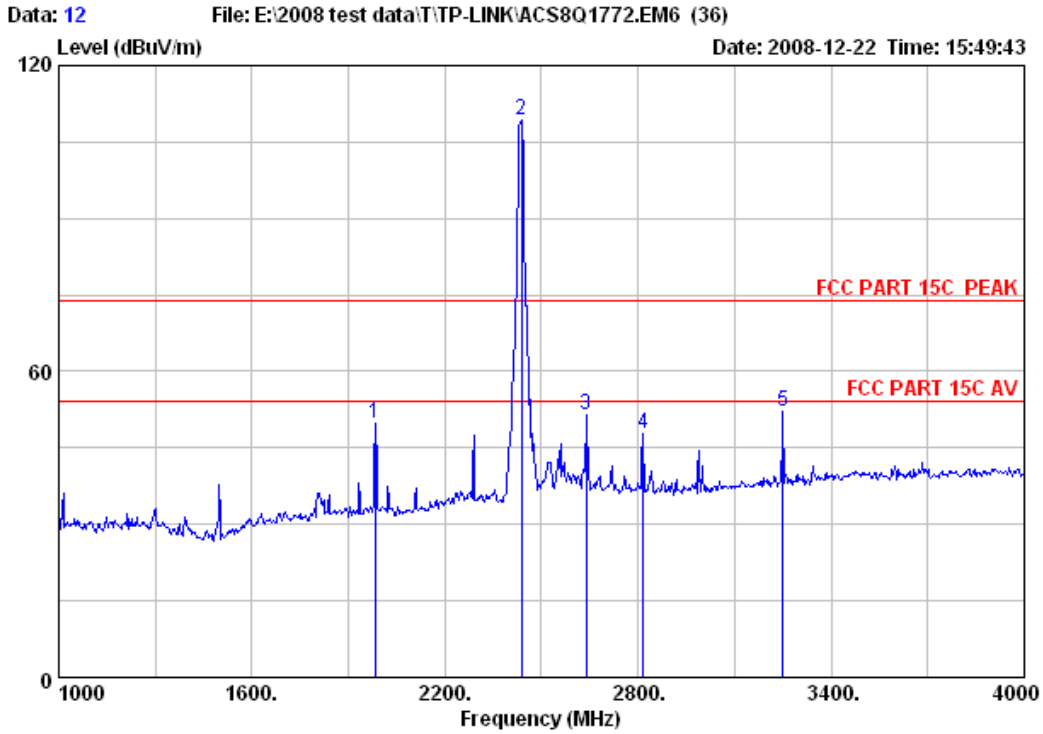



```
Site no.      : 3# Chamber                Data no.   : 11
Dis. / Ant.   : 3m   3115                 Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Sunny
EUT           : 54M Wireless PCI Adapter
Power Rating  : DC 3.3V From PC input AC 120V/60Hz
Test mode     : IEEE802.11b  CH6:2437MHz  Tx
Memo          : M/N:TL-WN350GD
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1984.000	27.83	6.16	36.08	52.53	50.44	74.00	23.56	Peak
2	2437.000	28.53	6.80	35.95	97.82	97.20	74.00	-23.20	Peak
3	2638.000	29.03	7.09	35.97	49.95	50.10	74.00	23.90	Peak
4	3250.000	30.88	8.23	35.61	47.52	51.02	74.00	22.98	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

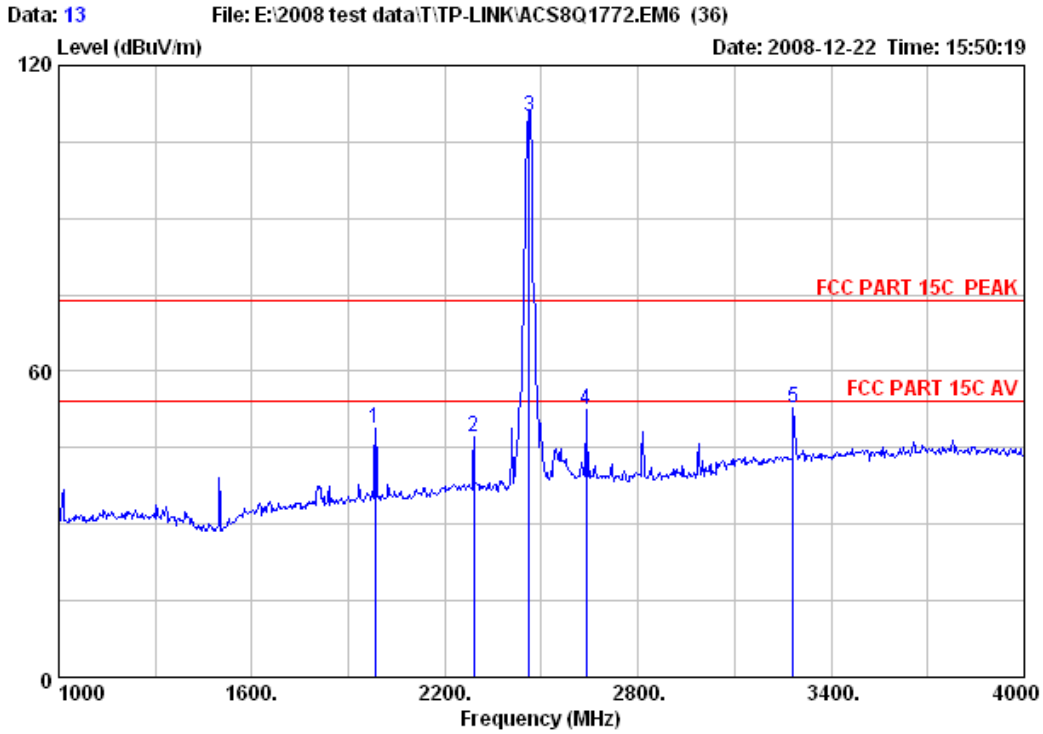


Site no. : 3# Chamber Data no. : 12
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH6:2437MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1984.000	27.83	6.16	36.08	51.78	49.69	74.00	24.31	Peak
2	2437.000	28.53	6.80	35.95	109.90	109.28	74.00	-35.28	Peak
3	2638.000	29.03	7.09	35.97	51.36	51.51	74.00	22.49	Peak
4	2815.000	29.61	7.40	35.89	46.62	47.74	74.00	26.26	Peak
5	3250.000	30.88	8.23	35.61	48.53	52.03	74.00	21.97	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

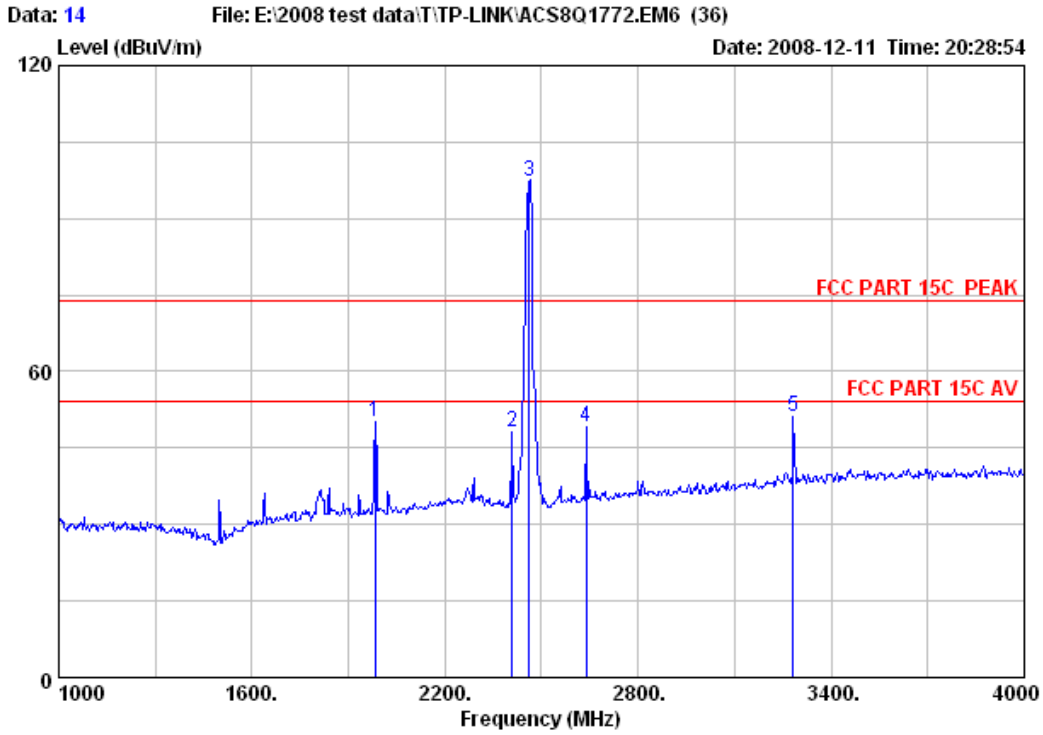



```
Site no.      : 3# Chamber                Data no.   : 13
Dis. / Ant.   : 3m   3115                 Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Sunny
EUT           : 54M Wireless PCI Adapter
Power Rating  : DC 3.3V From PC input AC 120V/60Hz
Test mode     : IEEE802.11b  CH11:2462MHz  Tx
Memo          : M/N:TL-WN350GD
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1984.000	27.83	6.16	36.08	50.95	48.86	74.00	25.14	Peak
2	2290.000	28.31	6.61	36.02	48.13	47.03	74.00	26.97	Peak
3	2462.000	28.55	6.84	35.96	110.66	110.09	74.00	-36.09	Peak
4	2638.000	29.03	7.09	35.97	52.48	52.63	74.00	21.37	Peak
5	3283.000	30.97	8.28	35.54	48.99	52.70	74.00	21.30	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

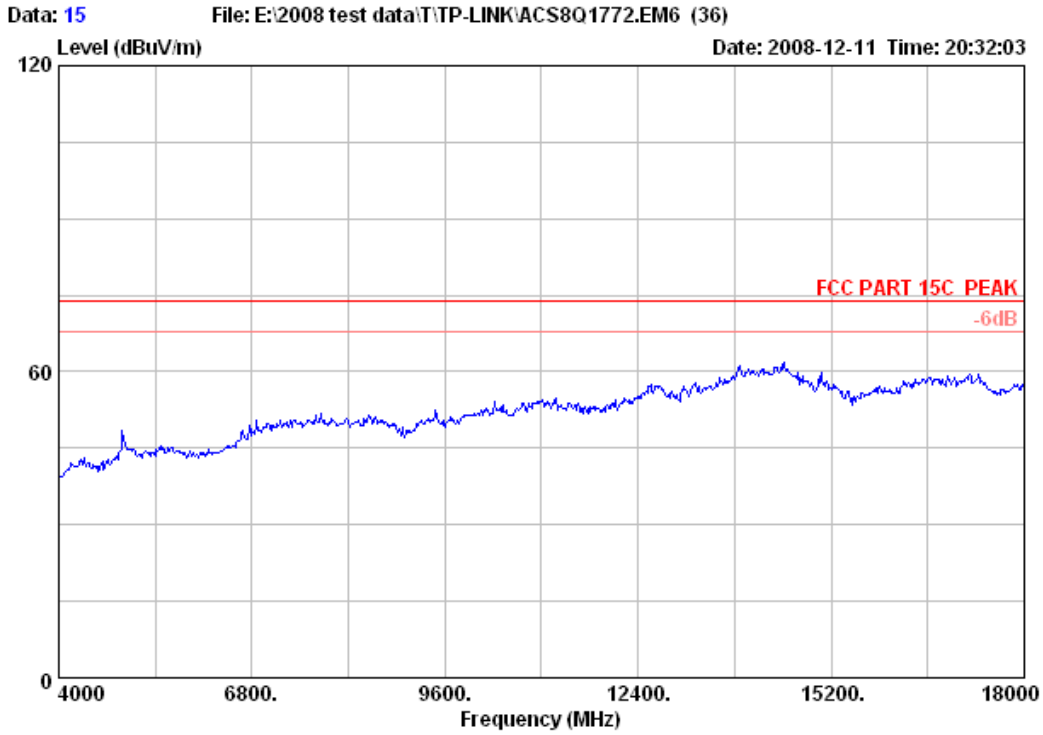


Site no. : 3# Chamber Data no. : 14
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH11:2462MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1984.000	27.83	6.16	36.08	52.21	50.12	74.00	23.88	Peak
2	2410.000	28.48	6.73	35.95	48.90	48.16	74.00	25.84	Peak
3	2462.000	28.55	6.84	35.96	98.00	97.43	74.00	-23.43	Peak
4	2638.000	29.03	7.09	35.97	48.98	49.13	74.00	24.87	Peak
5	3283.000	30.97	8.28	35.54	47.42	51.13	74.00	22.87	Peak

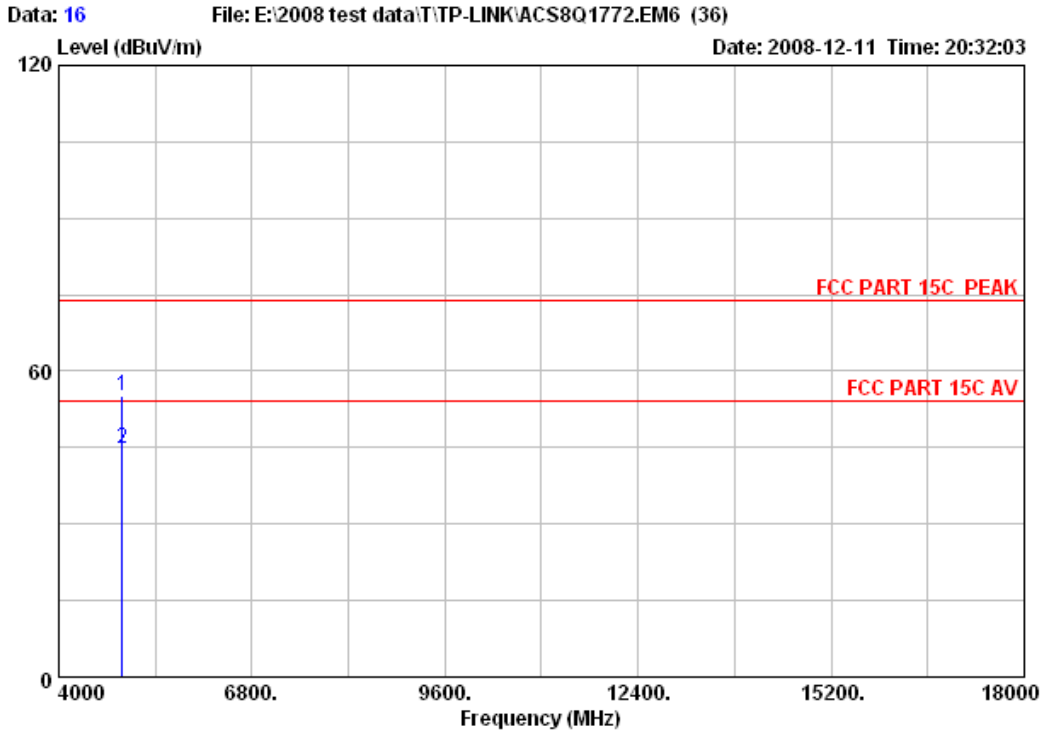
Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057




```
Site no.      : 3# Chamber              Data no.   : 15
Dis. / Ant.   : 3m   3115               Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer   : Sunny
EUT           : 54M Wireless PCI Adapter
Power Rating  : DC 3.3V From PC input AC 120V/60Hz
Test mode     : IEEE802.11b  CH11:2462MHz  Tx
Memo          : M/N:TL-WN350GD
```

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

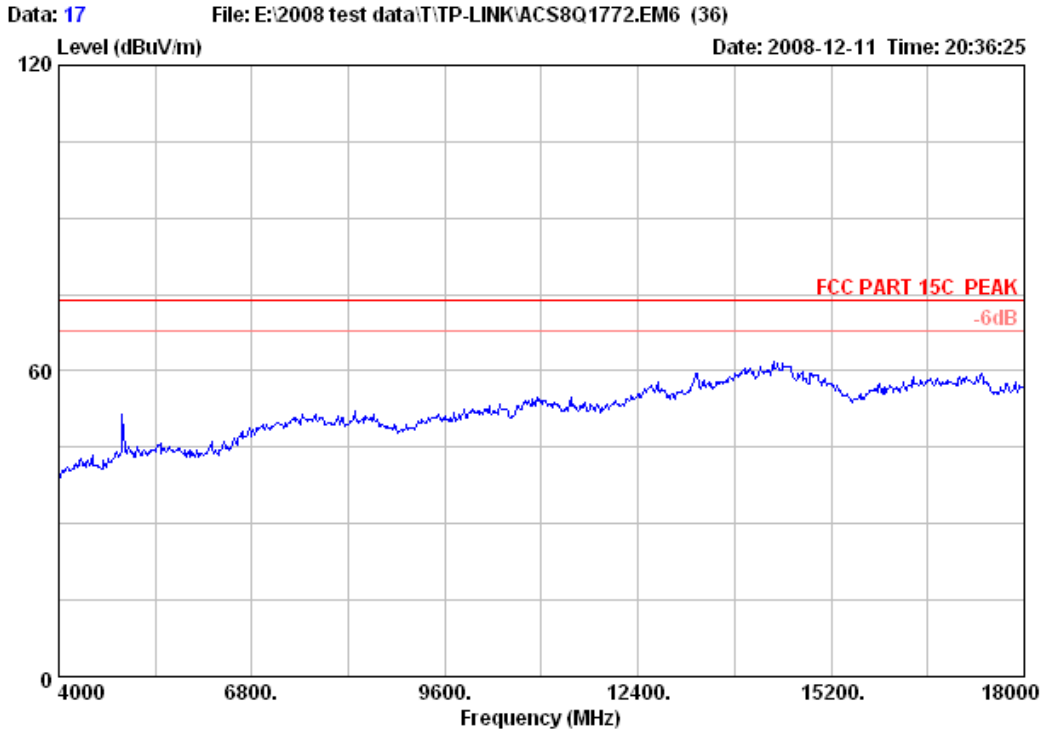


Site no. : 3# Chamber Data no. : 16
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH11:2462MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	35.09	10.58	35.10	44.74	55.31	74.00	18.69	Peak
2	4924.000	35.09	10.58	35.10	34.08	44.65	54.00	9.35	Average

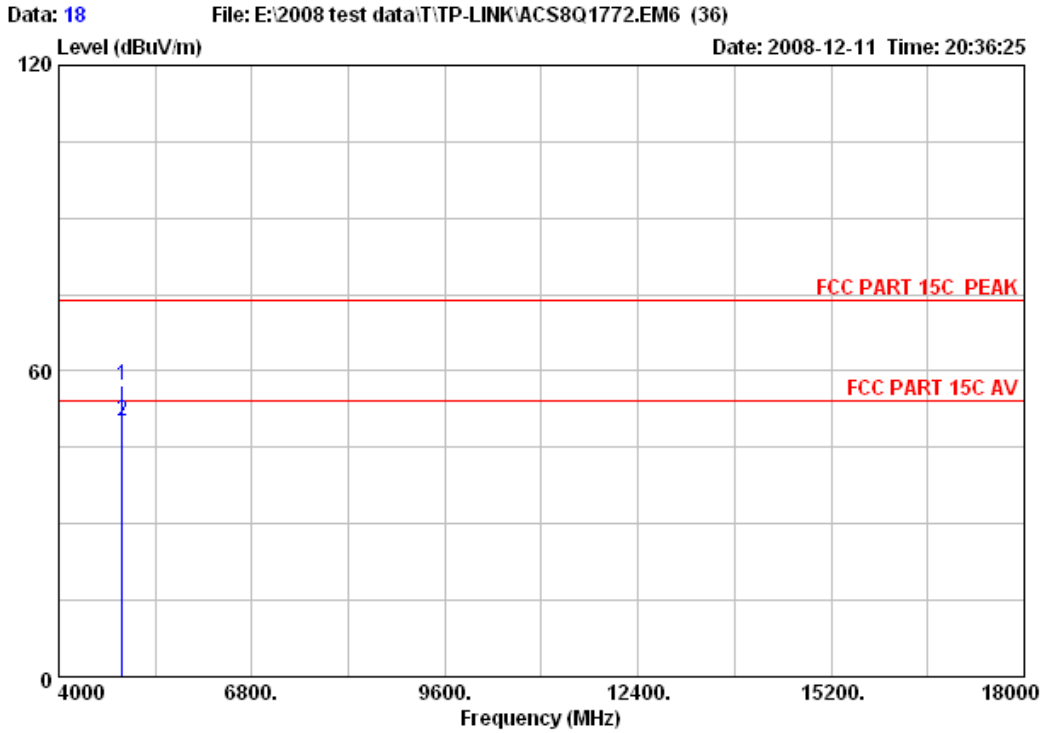
Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057




```
Site no.      : 3# Chamber              Data no.   : 17
Dis. / Ant.   : 3m   3115               Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer   : Sunny
EUT           : 54M Wireless PCI Adapter
Power Rating  : DC 3.3V From PC input AC 120V/60Hz
Test mode     : IEEE802.11b  CH11:2462MHz  Tx
Memo          : M/N:TL-WN350GD
```

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

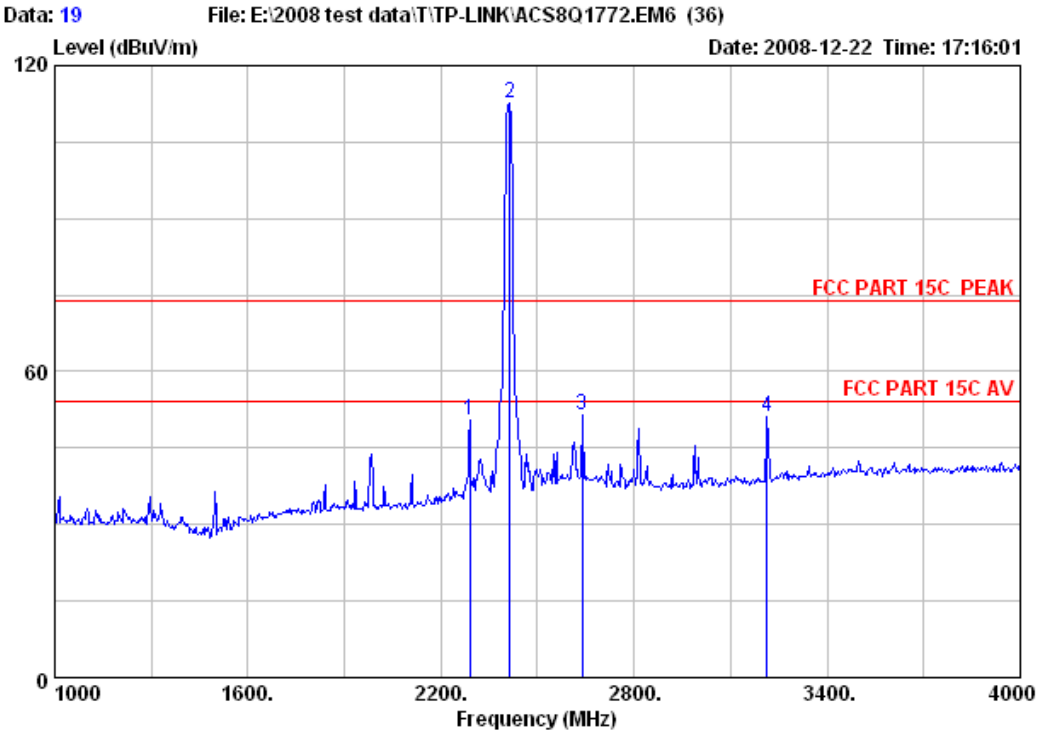


Site no. : 3# Chamber Data no. : 18
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH11:2462MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	35.09	10.58	35.10	46.50	57.07	74.00	16.93	Peak
2	4924.000	35.09	10.58	35.10	39.54	50.11	54.00	3.89	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

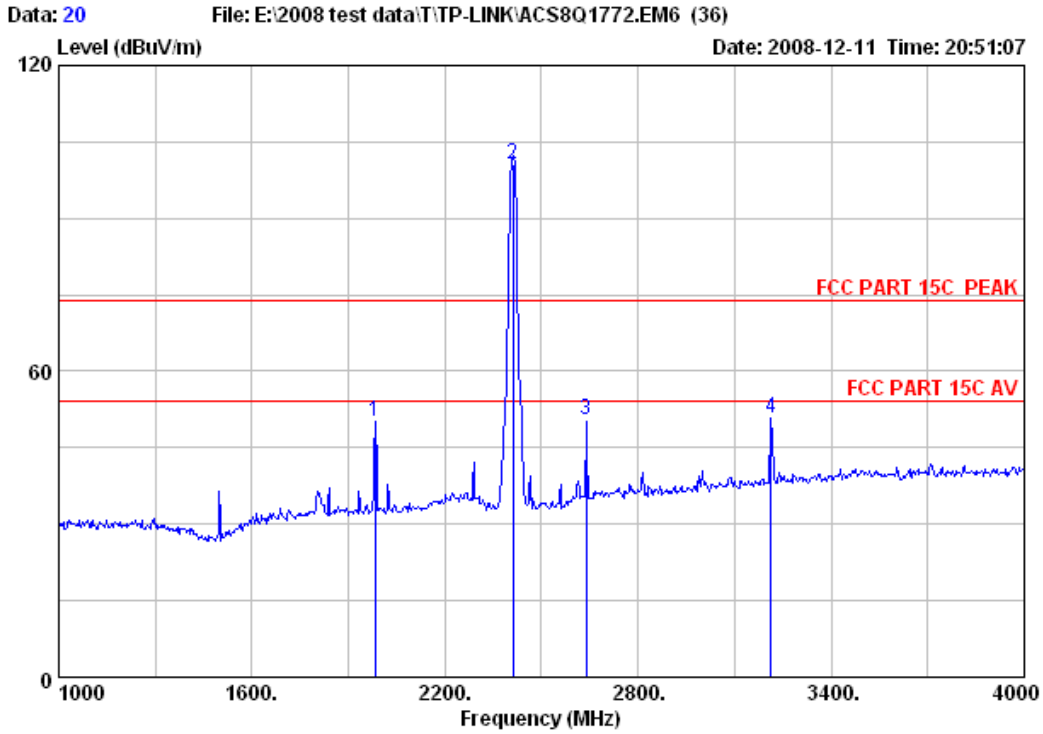


Site no. : 3# Chamber Data no. : 19
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH1:2412MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2290.000	28.31	6.61	36.02	51.70	50.60	74.00	23.40	Peak
2	2413.000	28.48	6.77	35.95	113.24	112.54	74.00	-38.54	Peak
3	2638.000	29.03	7.09	35.97	51.23	51.38	74.00	22.62	Peak
4	3214.000	30.78	8.13	35.69	47.79	51.01	74.00	22.99	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

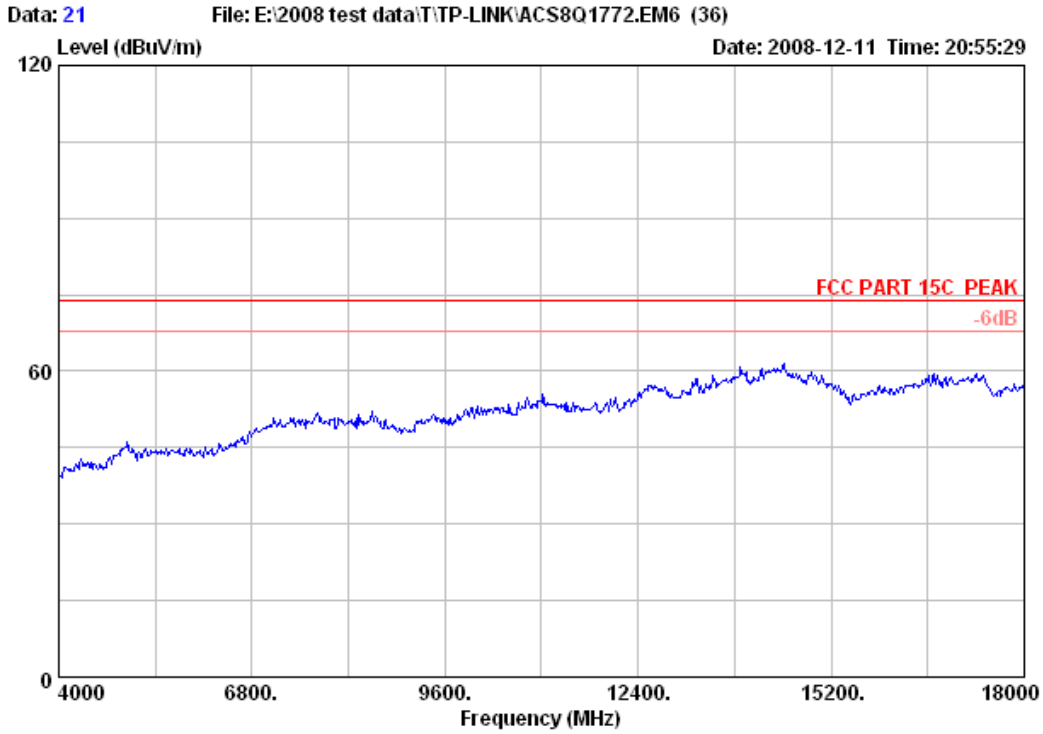


Site no. : 3# Chamber Data no. : 20
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH1:2412MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1984.000	27.83	6.16	36.08	52.18	50.09	74.00	23.91	Peak
2	2412.000	28.48	6.73	35.95	101.46	100.72	74.00	-26.72	Peak
3	2638.000	29.03	7.09	35.97	50.28	50.43	74.00	23.57	Peak
4	3214.000	30.78	8.13	35.69	47.45	50.67	74.00	23.33	Peak

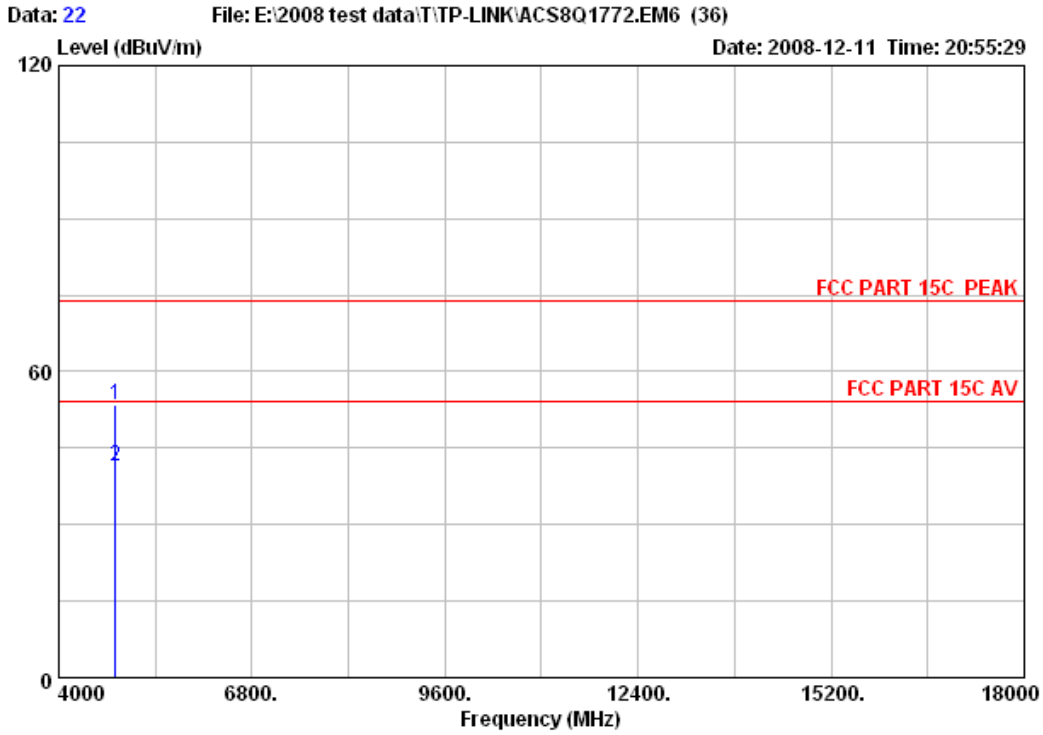
Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057




```
Site no.      : 3# Chamber                Data no.   : 21
Dis. / Ant.   : 3m   3115                 Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Sunny
EUT           : 54M Wireless PCI Adapter
Power Rating  : DC 3.3V From PC input AC 120V/60Hz
Test mode     : IEEE802.11g  CH1:2412MHz  Tx
Memo          : M/N:TL-WN350GD
```

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

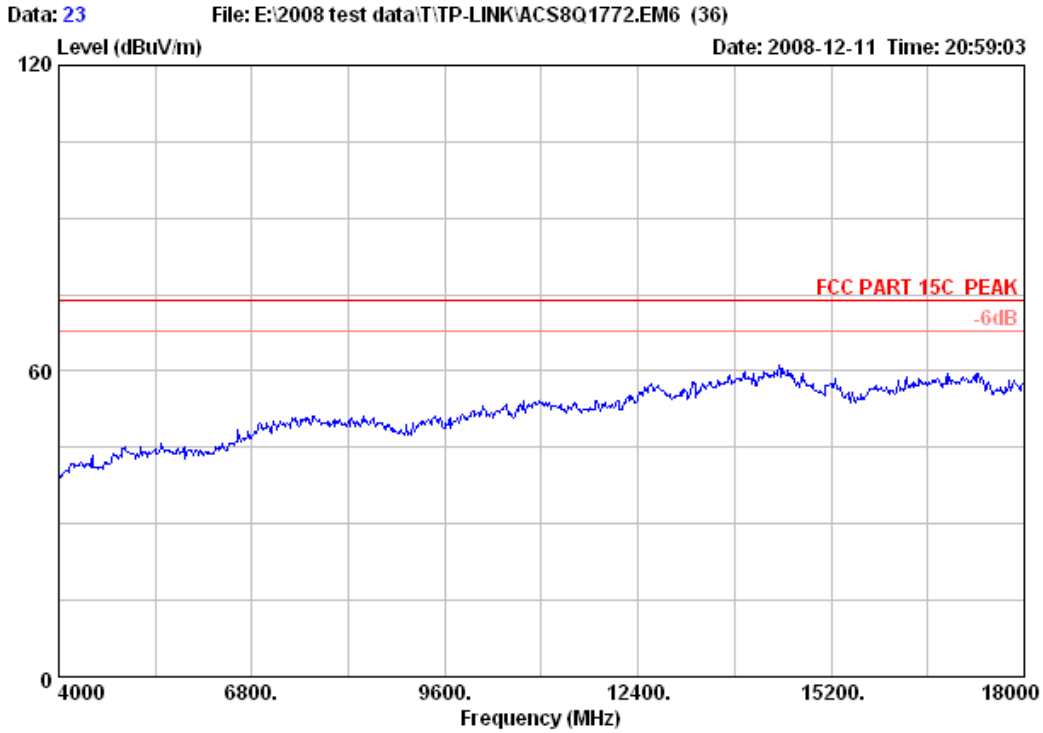


Site no. : 3# Chamber Data no. : 22
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH1:2412MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	34.47	10.55	35.20	43.50	53.32	74.00	20.68	Peak
2	4824.000	34.47	10.55	35.20	31.55	41.37	54.00	12.63	Average

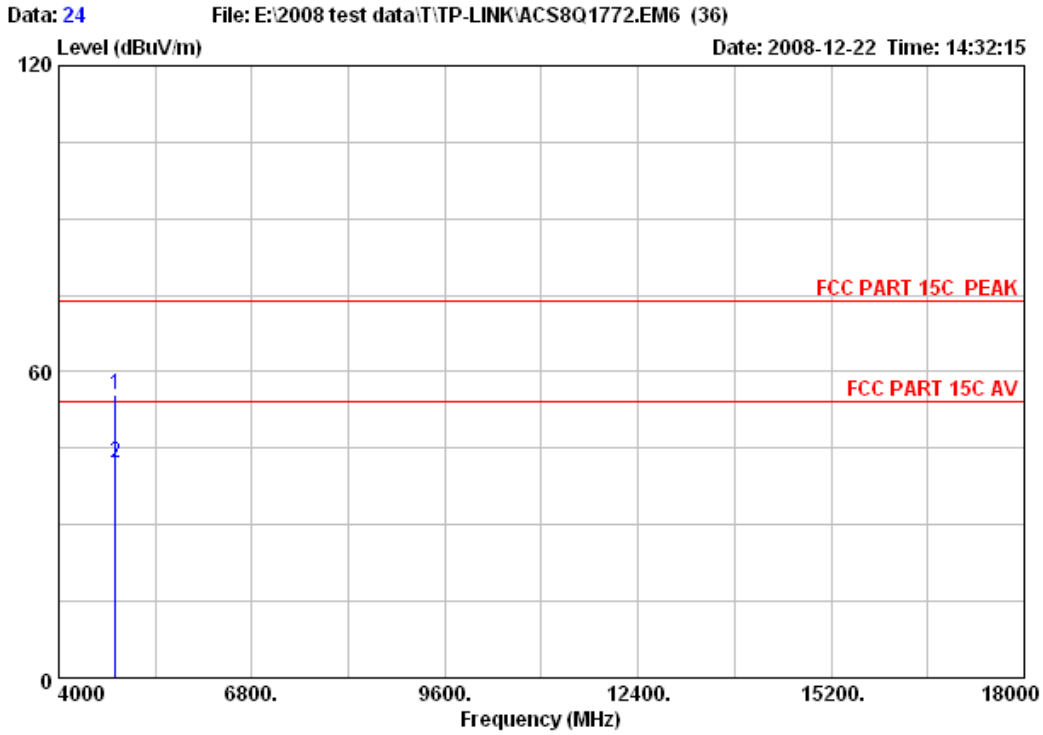
Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057




```
Site no.      : 3# Chamber                Data no.   : 23
Dis. / Ant.   : 3m   3115                 Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Sunny
EUT           : 54M Wireless PCI Adapter
Power Rating  : DC 3.3V From PC input AC 120V/60Hz
Test mode     : IEEE802.11g  CH1:2412MHz  Tx
Memo          : M/N:TL-WN350GD
```

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

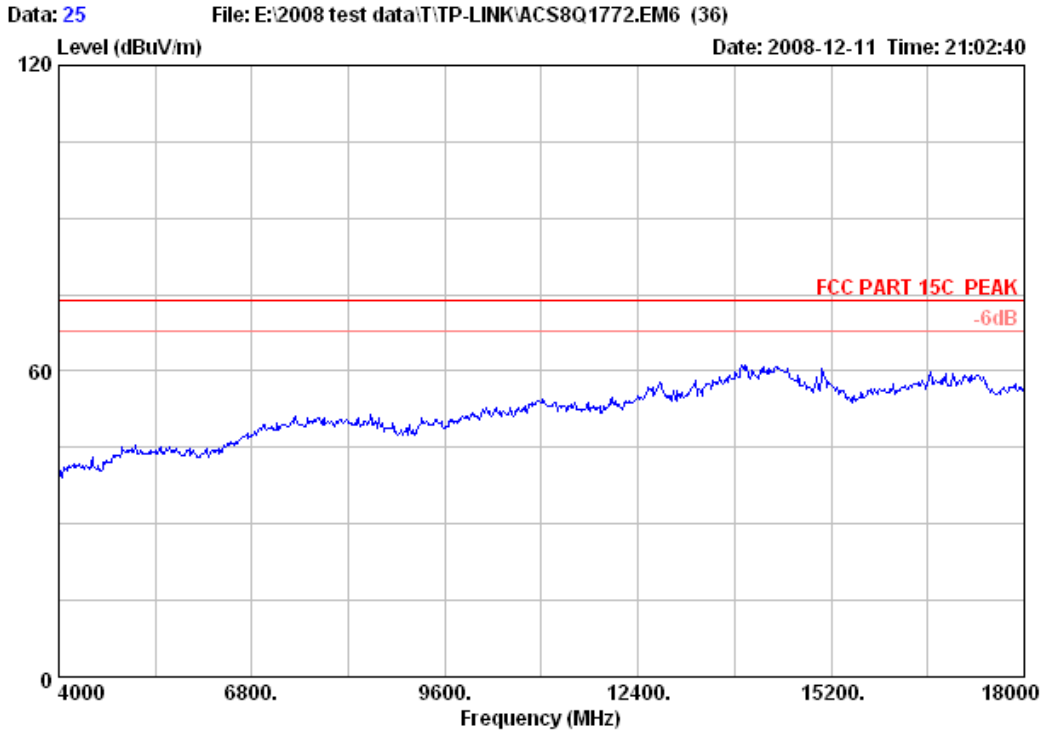


Site no. : 3# Chamber Data no. : 24
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH1:2412MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	34.47	10.55	35.20	45.79	55.61	74.00	18.39	Peak
2	4824.000	34.47	10.55	35.20	32.17	41.99	54.00	12.01	Average

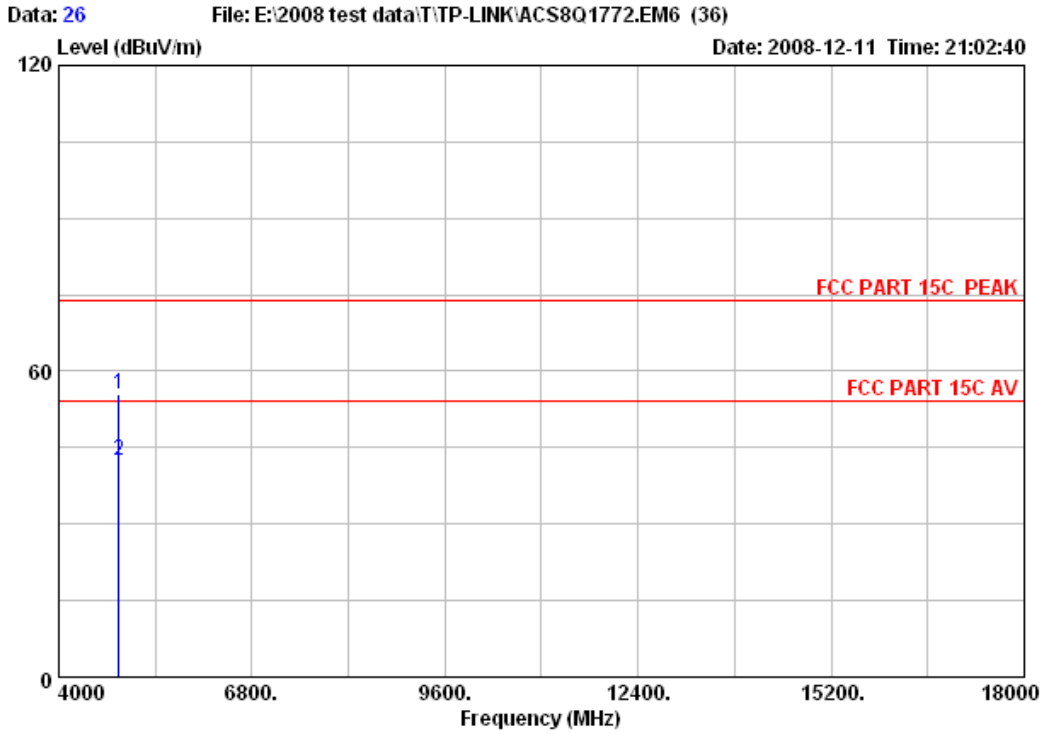
Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057




```
Site no.      : 3# Chamber                Data no.   : 25
Dis. / Ant.   : 3m   3115                 Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Sunny
EUT           : 54M Wireless PCI Adapter
Power Rating  : DC 3.3V From PC input AC 120V/60Hz
Test mode     : IEEE802.11g  CH6:2437MHz  Tx
Memo          : M/N:TL-WN350GD
```

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

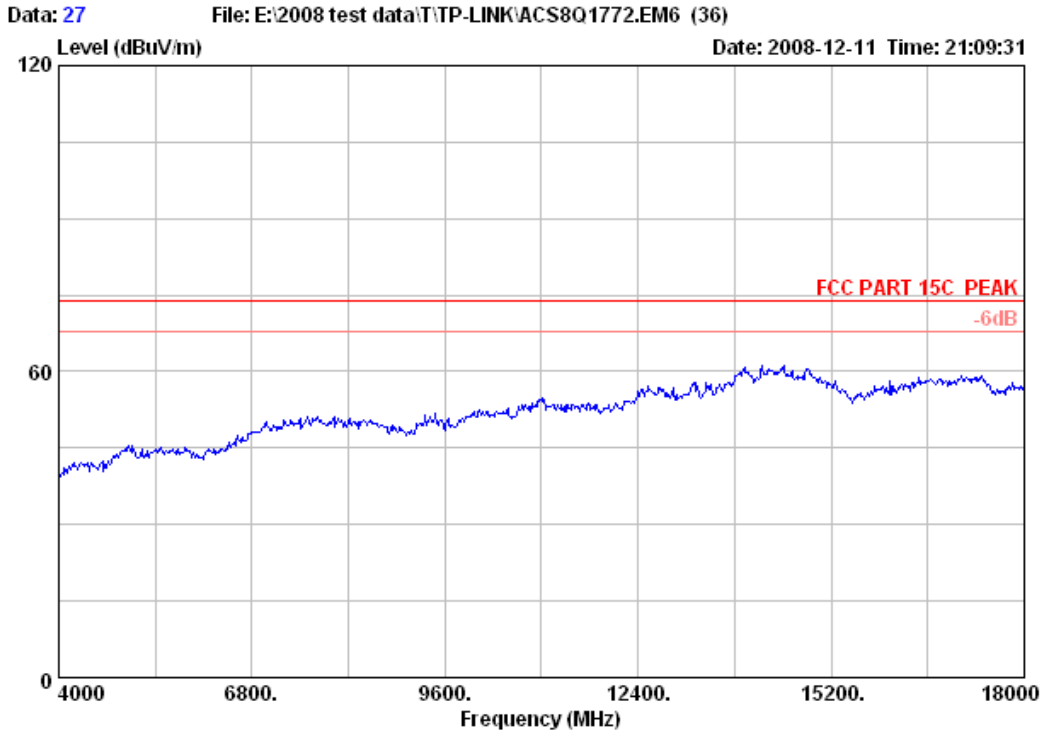


Site no. : 3# Chamber Data no. : 26
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH6:2437MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	34.78	10.56	35.13	45.14	55.35	74.00	18.65	Peak
2	4874.000	34.78	10.56	35.13	32.27	42.48	54.00	11.52	Average

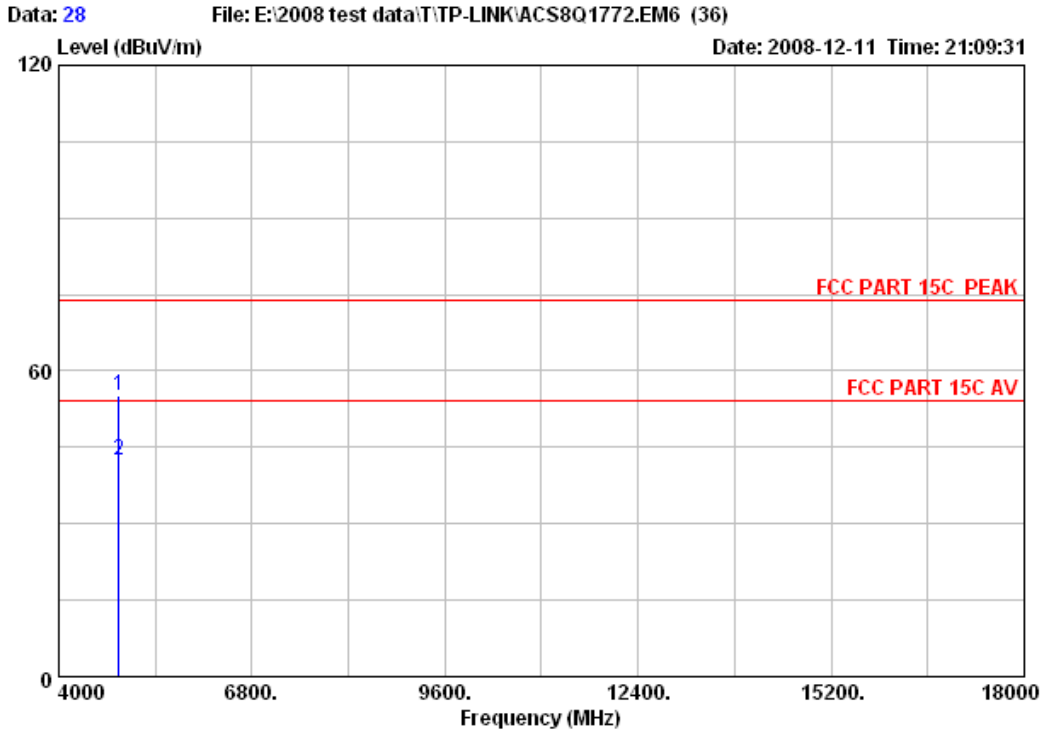
Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057




```
Site no.      : 3# Chamber              Data no.   : 27
Dis. / Ant.   : 3m   3115               Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer   : Sunny
EUT           : 54M Wireless PCI Adapter
Power Rating  : DC 3.3V From PC input AC 120V/60Hz
Test mode     : IEEE802.11g  CH6:2437MHz  Tx
Memo          : M/N:TL-WN350GD
```

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

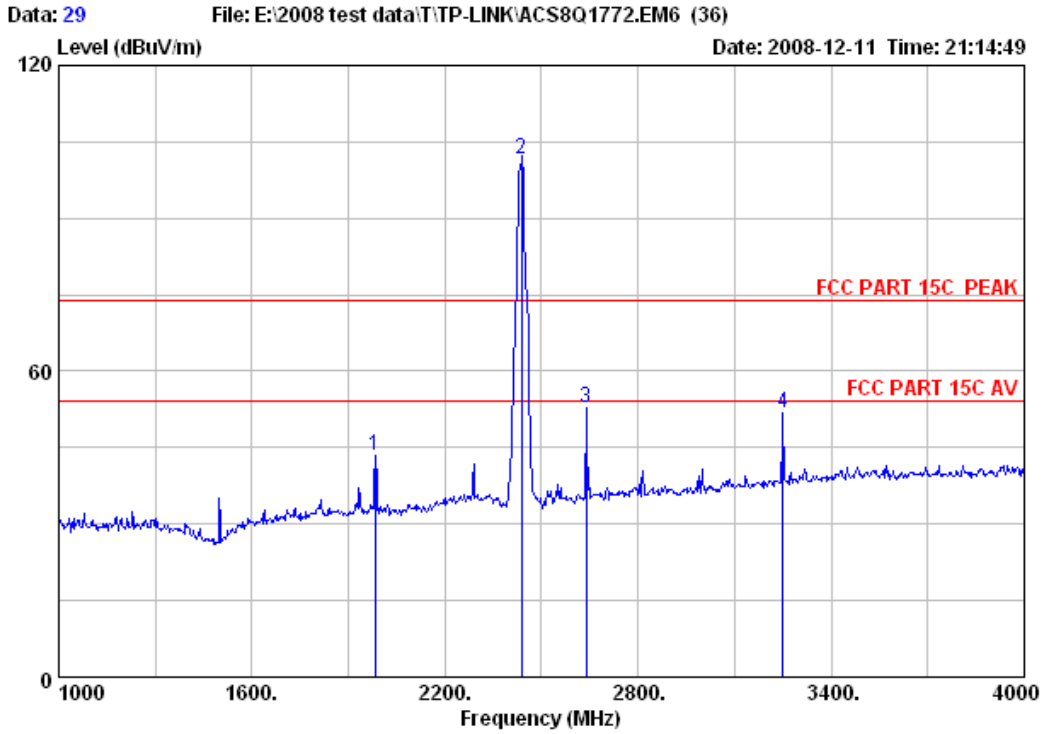


Site no. : 3# Chamber Data no. : 28
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH6:2437MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	34.78	10.56	35.13	44.89	55.10	74.00	18.90	Peak
2	4874.000	34.78	10.56	35.13	32.22	42.43	74.00	31.57	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

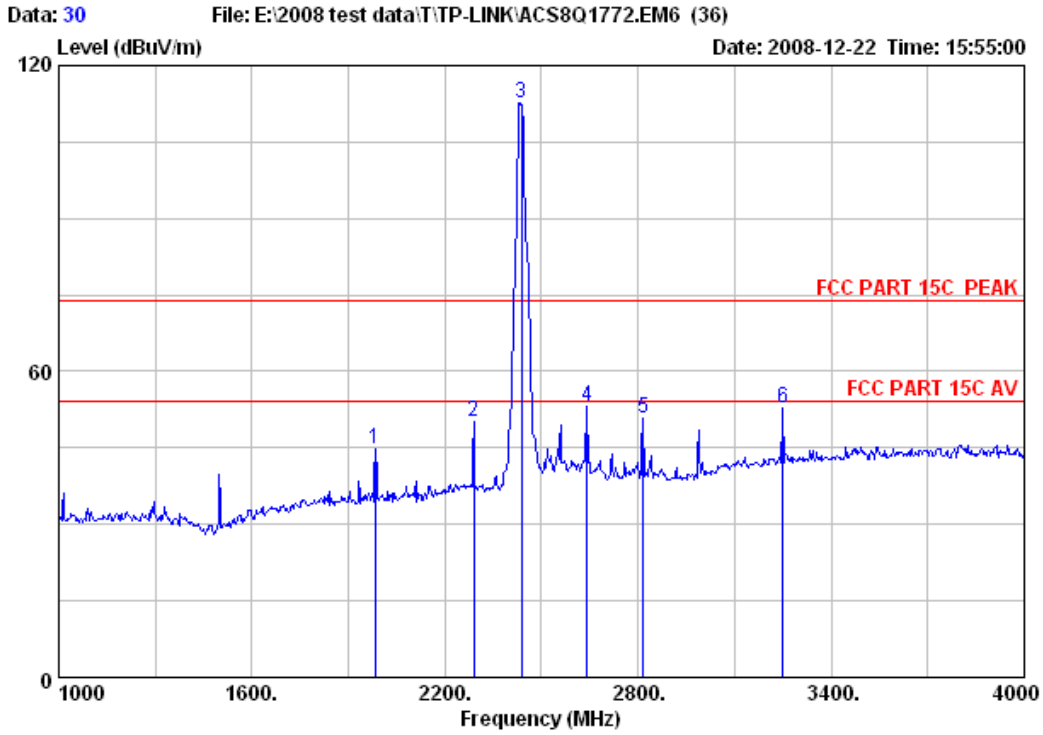


Site no. : 3# Chamber Data no. : 29
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH6:2437MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1984.000	27.83	6.16	36.08	45.52	43.43	74.00	30.57	Peak
2	2437.000	28.53	6.80	35.95	102.36	101.74	74.00	-27.74	Peak
3	2638.000	29.03	7.09	35.97	52.66	52.81	74.00	21.19	Peak
4	3250.000	30.88	8.23	35.61	48.29	51.79	74.00	22.21	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

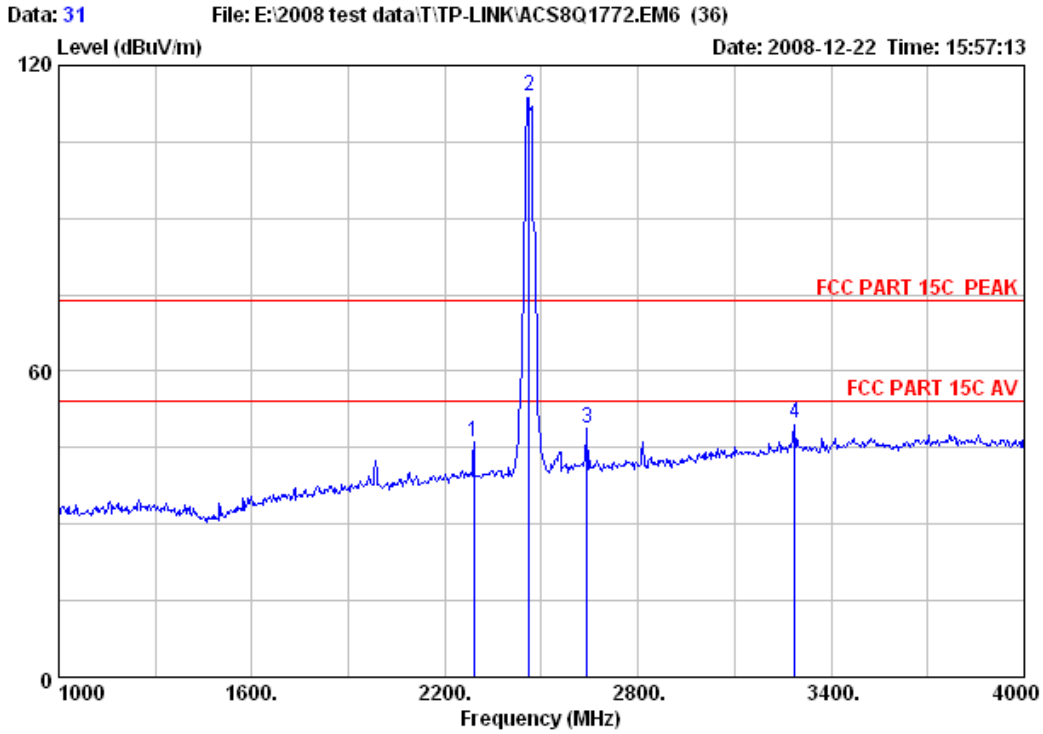


Site no. : 3# Chamber Data no. : 30
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH6:2437MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1984.000	27.83	6.16	36.08	46.90	44.81	74.00	29.19	Peak
2	2290.000	28.31	6.61	36.02	51.28	50.18	74.00	23.82	Peak
3	2437.000	28.53	6.80	35.95	113.36	112.74	74.00	-38.74	Peak
4	2641.000	29.08	7.12	35.97	52.98	53.21	74.00	20.79	Peak
5	2815.000	29.61	7.40	35.89	49.54	50.66	74.00	23.34	Peak
6	3250.000	30.88	8.23	35.61	49.31	52.81	74.00	21.19	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

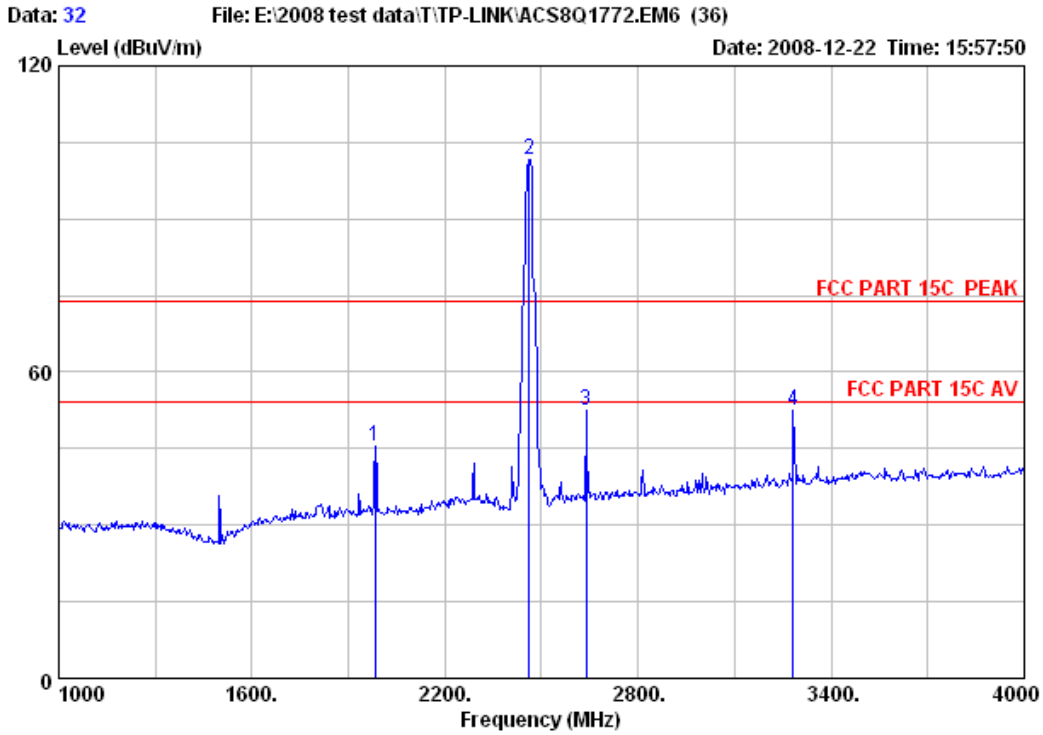


Site no. : 3# Chamber Data no. : 31
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH11:2462MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2290.000	28.31	6.61	36.02	47.33	46.23	74.00	27.77	Peak
2	2462.000	28.55	6.84	35.96	114.54	113.97	74.00	-39.97	Peak
3	2641.000	29.08	7.12	35.97	48.43	48.66	74.00	25.34	Peak
4	3286.000	30.97	8.33	35.54	46.02	49.78	74.00	24.22	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

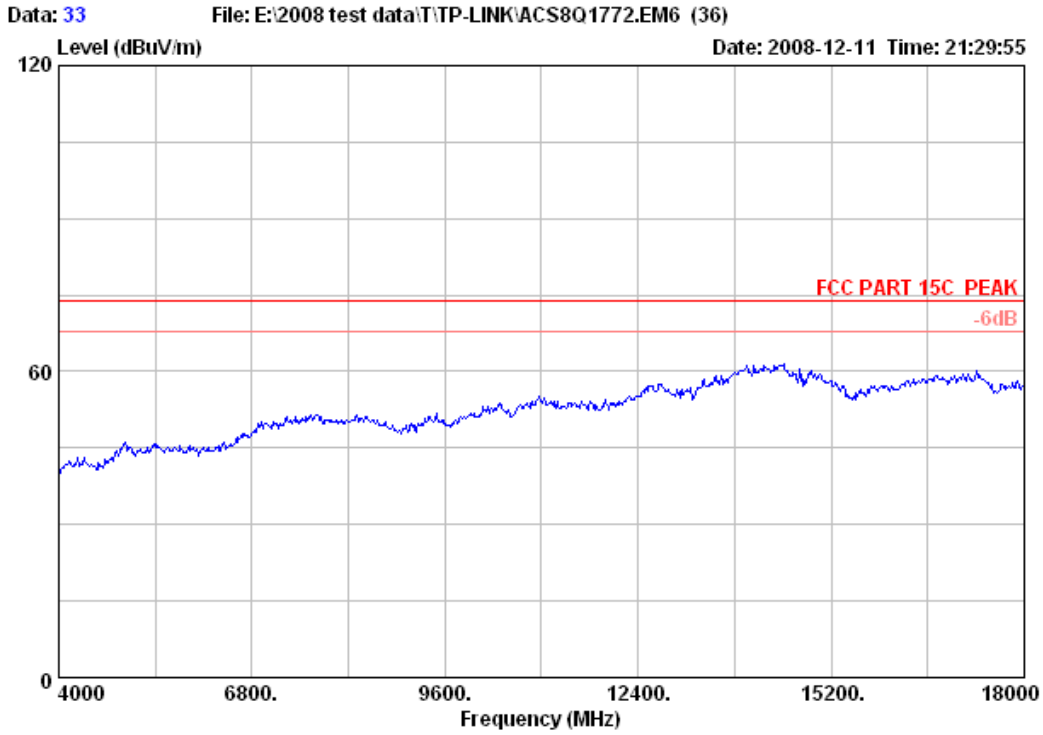


Site no. : 3# Chamber Data no. : 32
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH11:2462MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1984.000	27.83	6.16	36.08	47.41	45.32	74.00	28.68	Peak
2	2462.000	28.55	6.84	35.96	102.18	101.61	74.00	-27.61	Peak
3	2638.000	29.03	7.09	35.97	52.20	52.35	74.00	21.65	Peak
4	3283.000	30.97	8.28	35.54	48.66	52.37	74.00	21.63	Peak

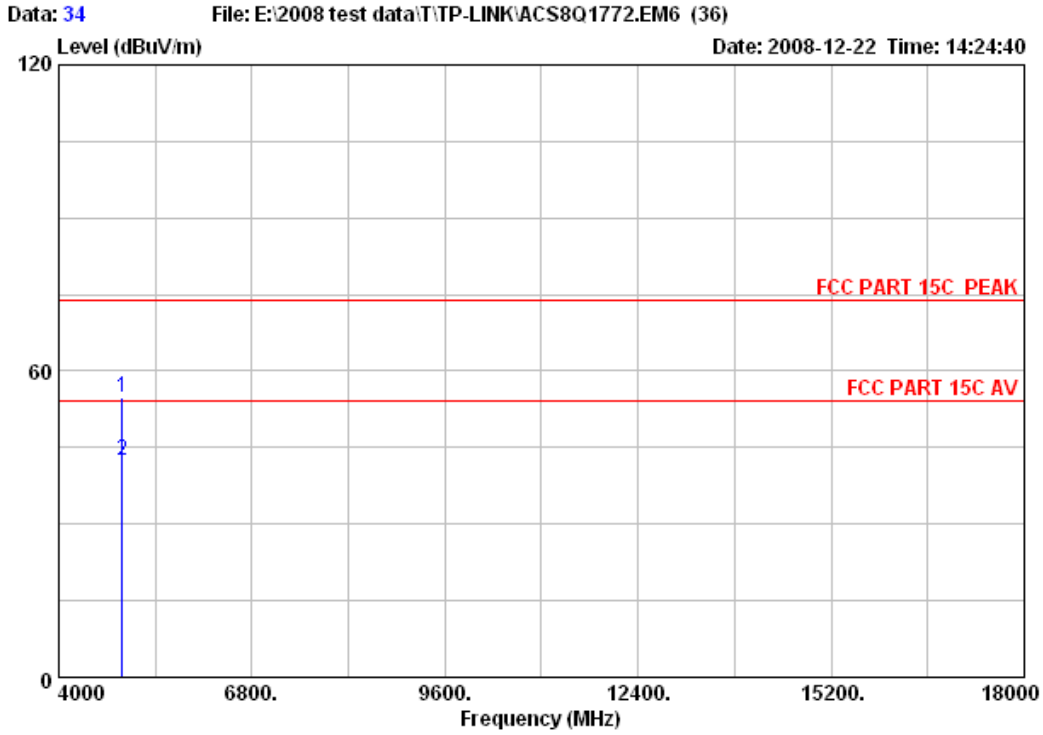
Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057




```
Site no.      : 3# Chamber              Data no.   : 33
Dis. / Ant.   : 3m   3115               Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer   : Sunny
EUT           : 54M Wireless PCI Adapter
Power Rating  : DC 3.3V From PC input AC 120V/60Hz
Test mode     : IEEE802.11g  CH11:2462MHz  Tx
Memo          : M/N:TL-WN350GD
```

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

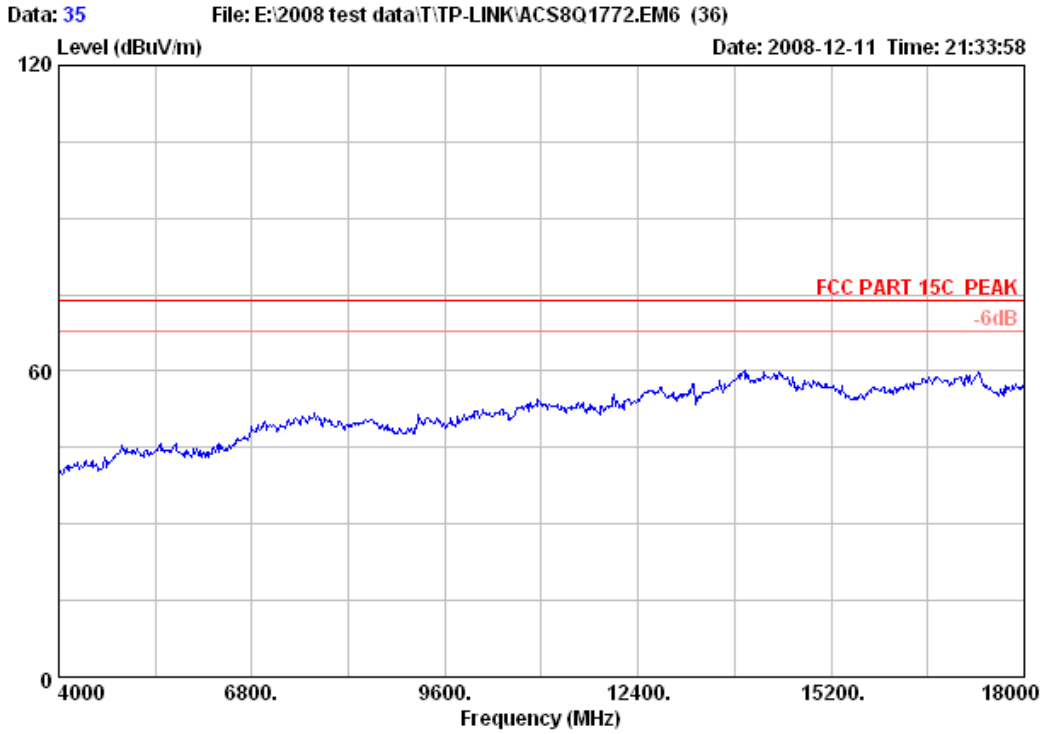


Site no. : 3# Chamber Data no. : 34
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH11:2462MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	35.09	10.58	35.10	44.39	54.96	74.00	19.04	Peak
2	4924.000	35.09	10.58	35.10	32.01	42.58	54.00	11.42	Average

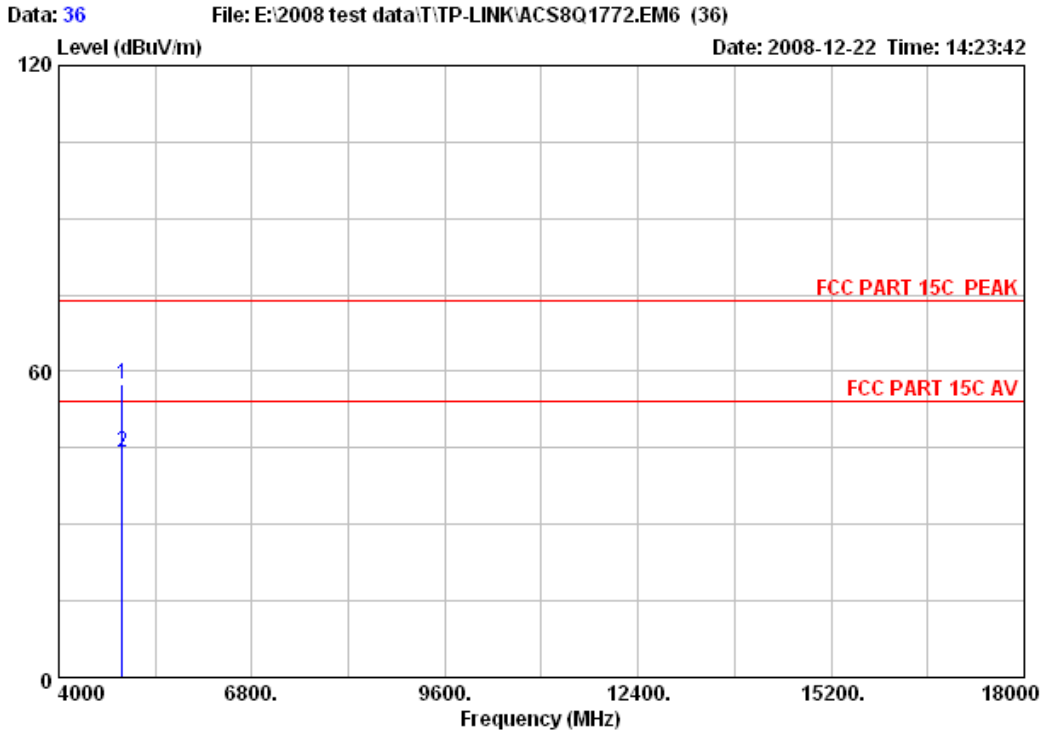
Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057




```
Site no.      : 3# Chamber              Data no.   : 35
Dis. / Ant.   : 3m   3115               Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer   : Sunny
EUT           : 54M Wireless PCI Adapter
Power Rating  : DC 3.3V From PC input AC 120V/60Hz
Test mode     : IEEE802.11g  CH11:2462MHz  Tx
Memo          : M/N:TL-WN350GD
```

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



Site no. : 3# Chamber Data no. : 36
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH11:2462MHz Tx
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	35.09	10.58	35.10	46.87	57.44	74.00	16.56	Peak
2	4924.000	35.09	10.58	35.10	33.62	44.19	54.00	9.81	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

5. CONDUCTED SPURIOUS EMISSIONS

5.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May,10, 08	1 Year
2	RF Cable	Hubersuhner	SUCOFLEX	182768/4	May,28, 08	1Year

5.2.Limit

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

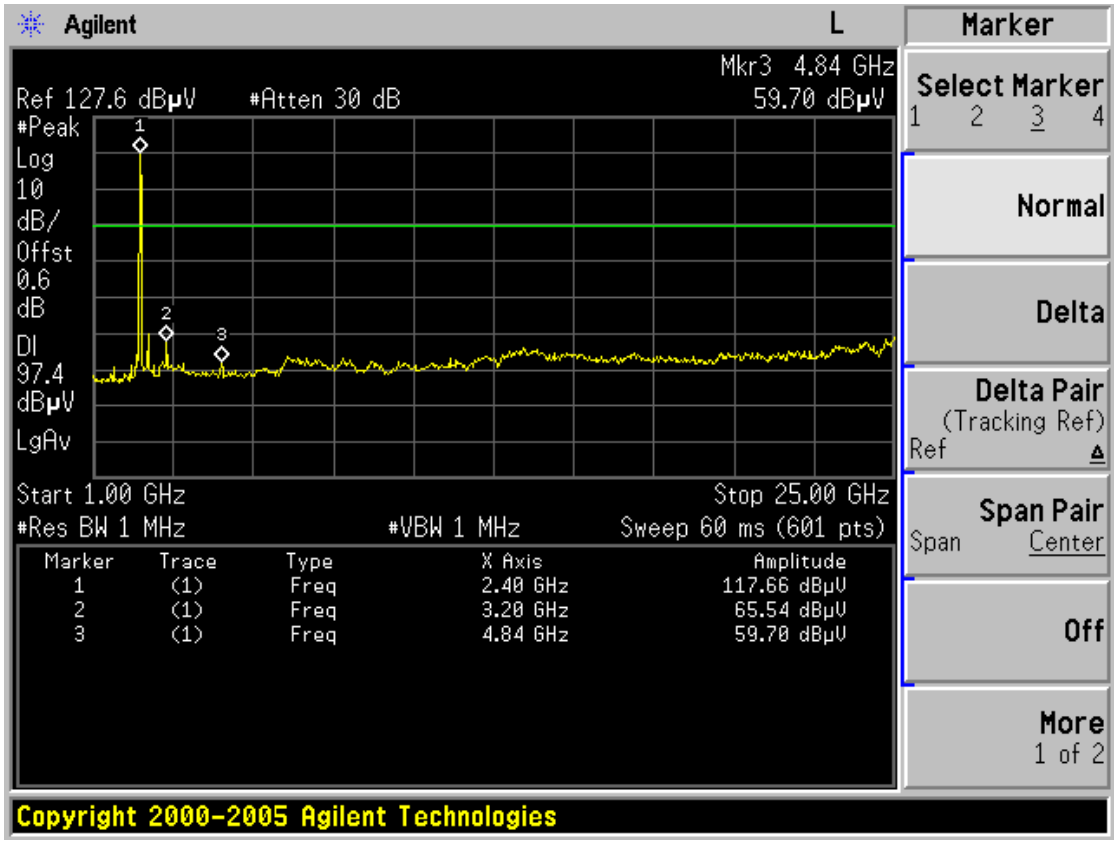
5.3.Test Procedure

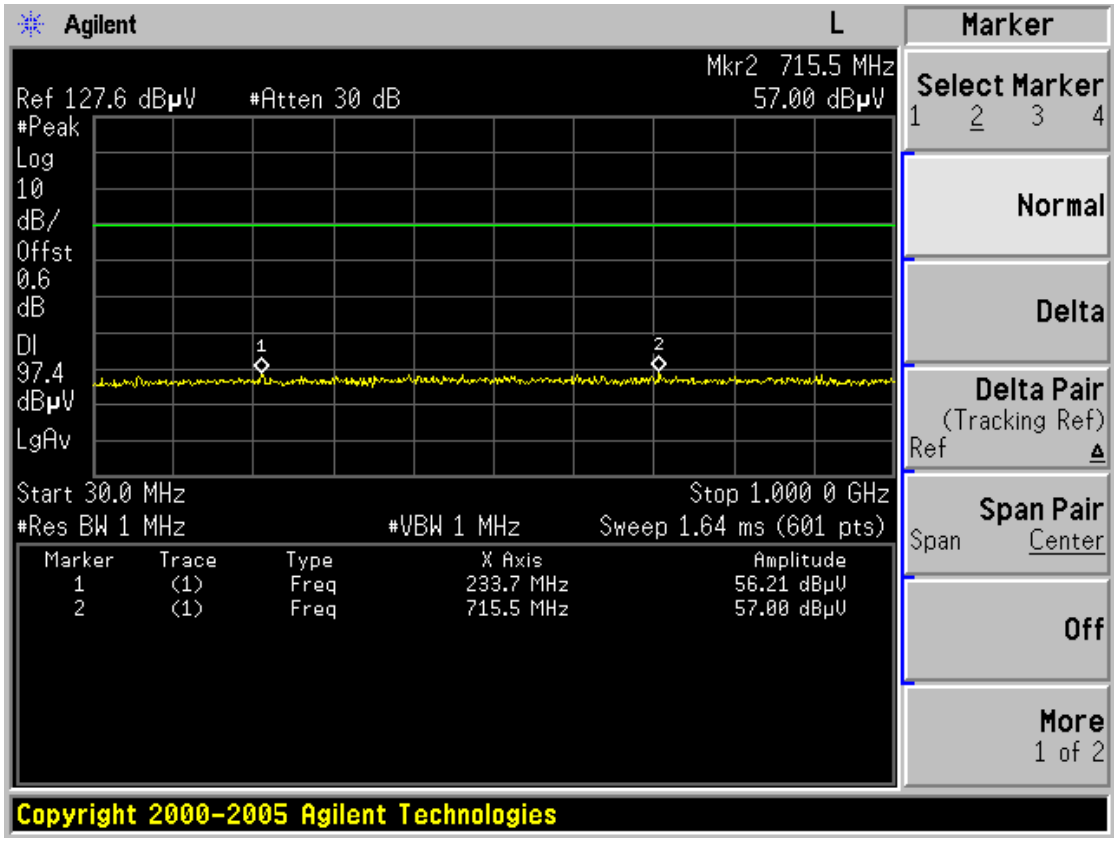
The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz.

5.4.Test result

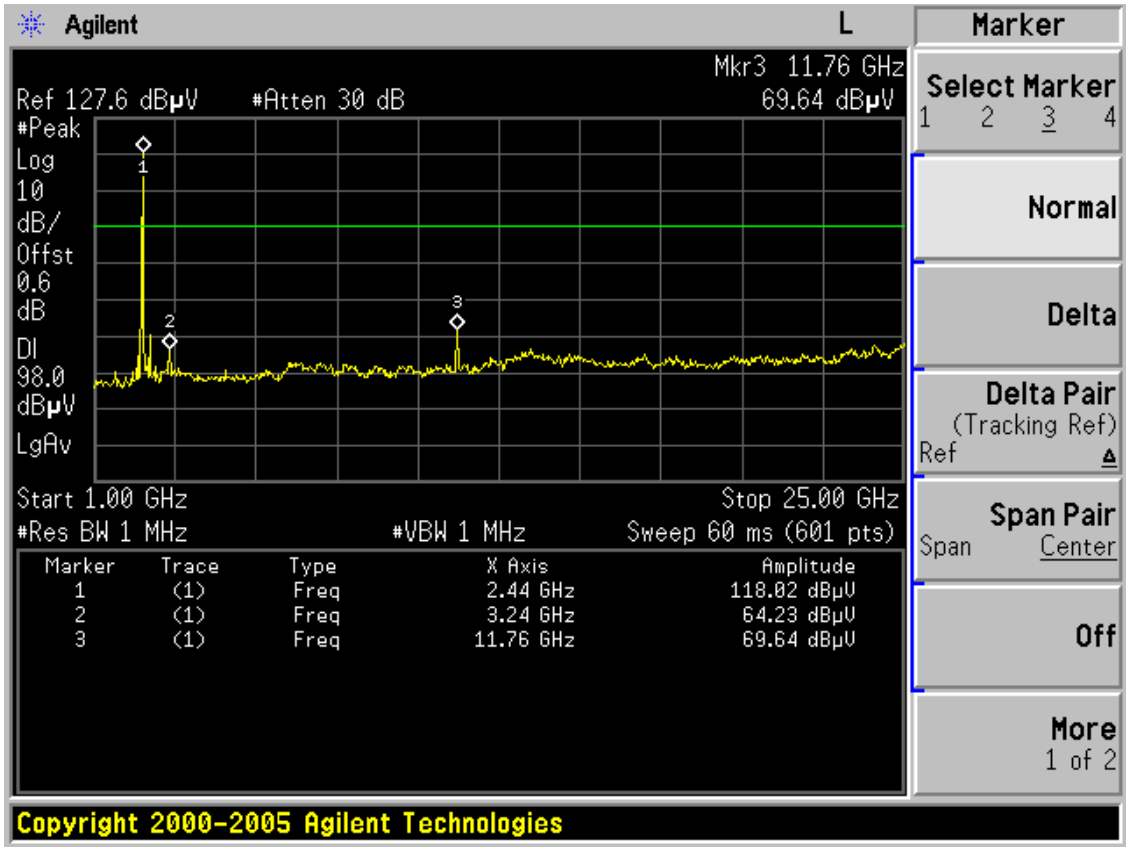
PASS (The testing data was attached in the next pages.)

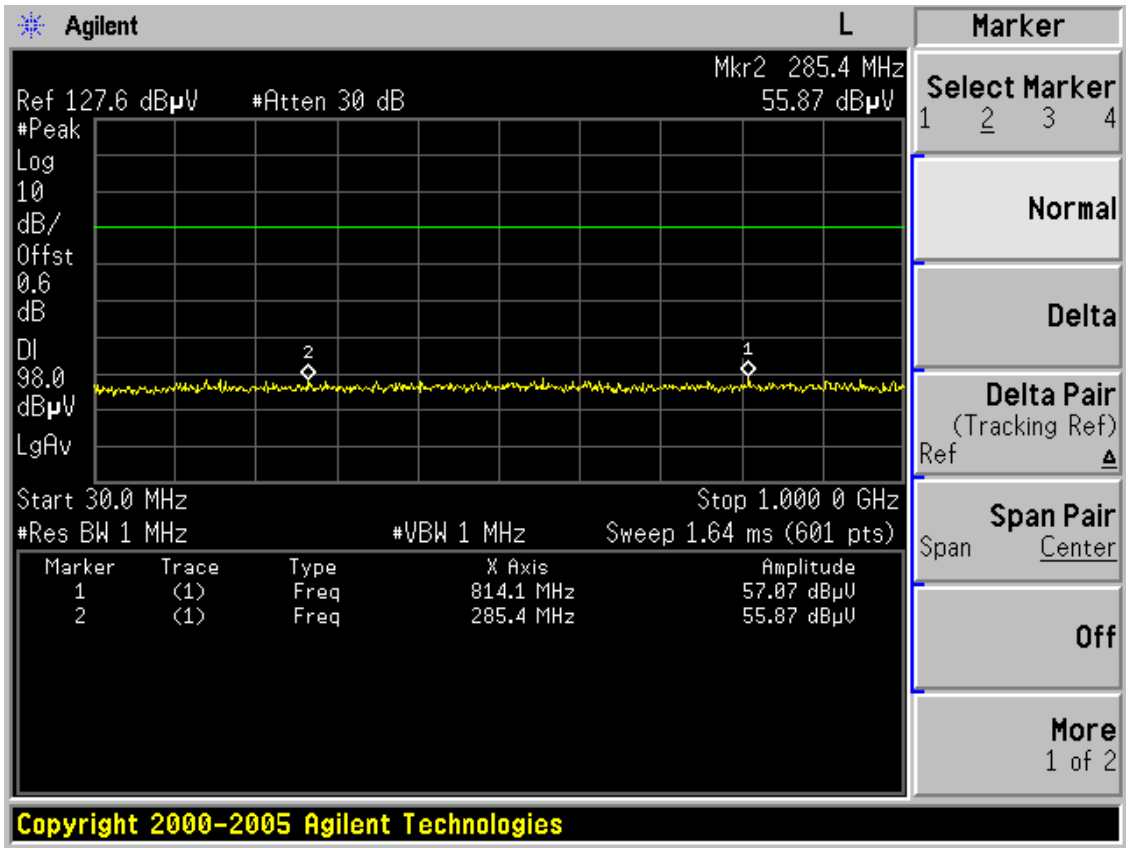
Conducted emission test data:
Test Mode: IEEE 802.11b TX
Test CH1: 2412MHz



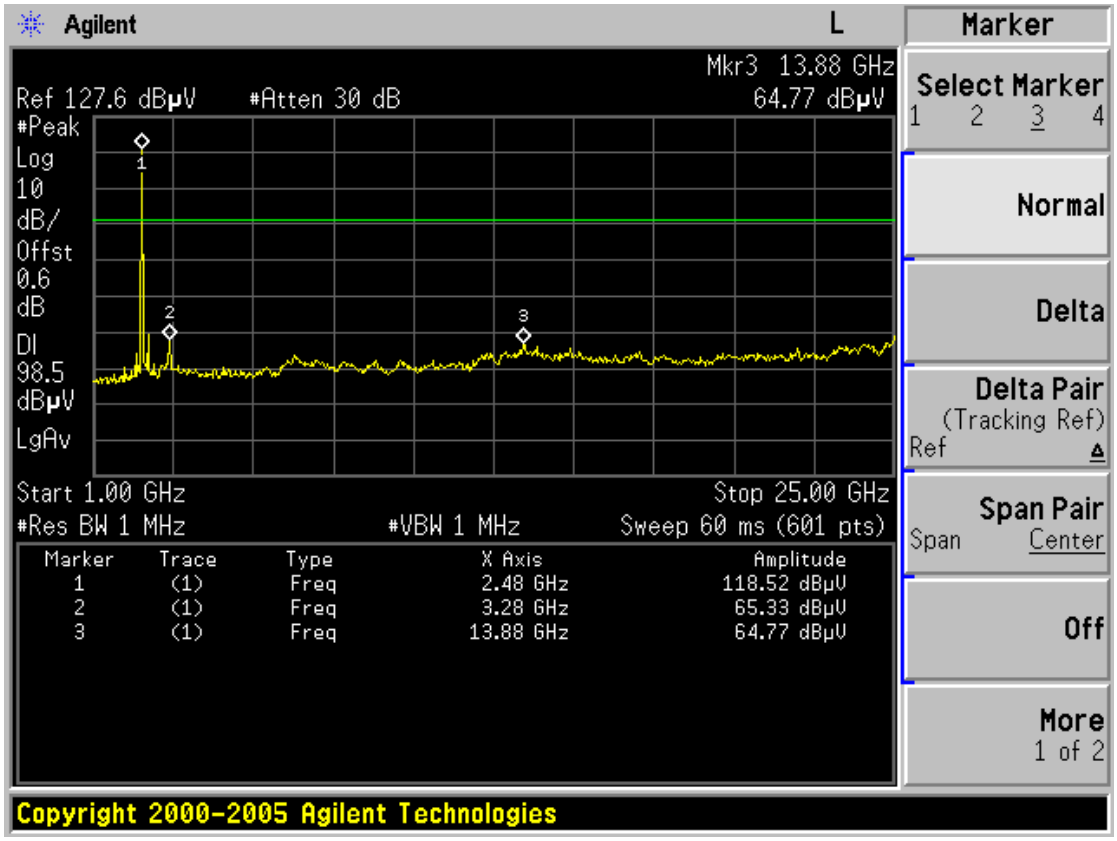


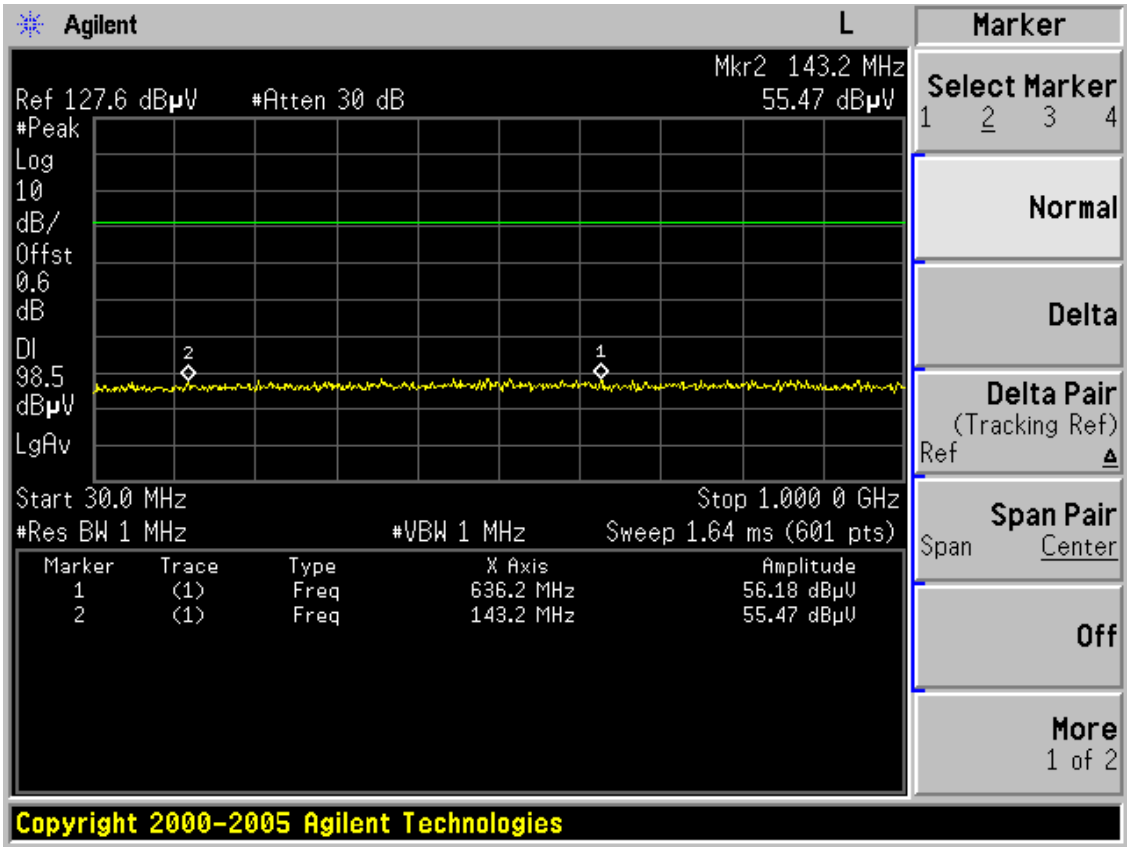
Test CH6: 2437MHz



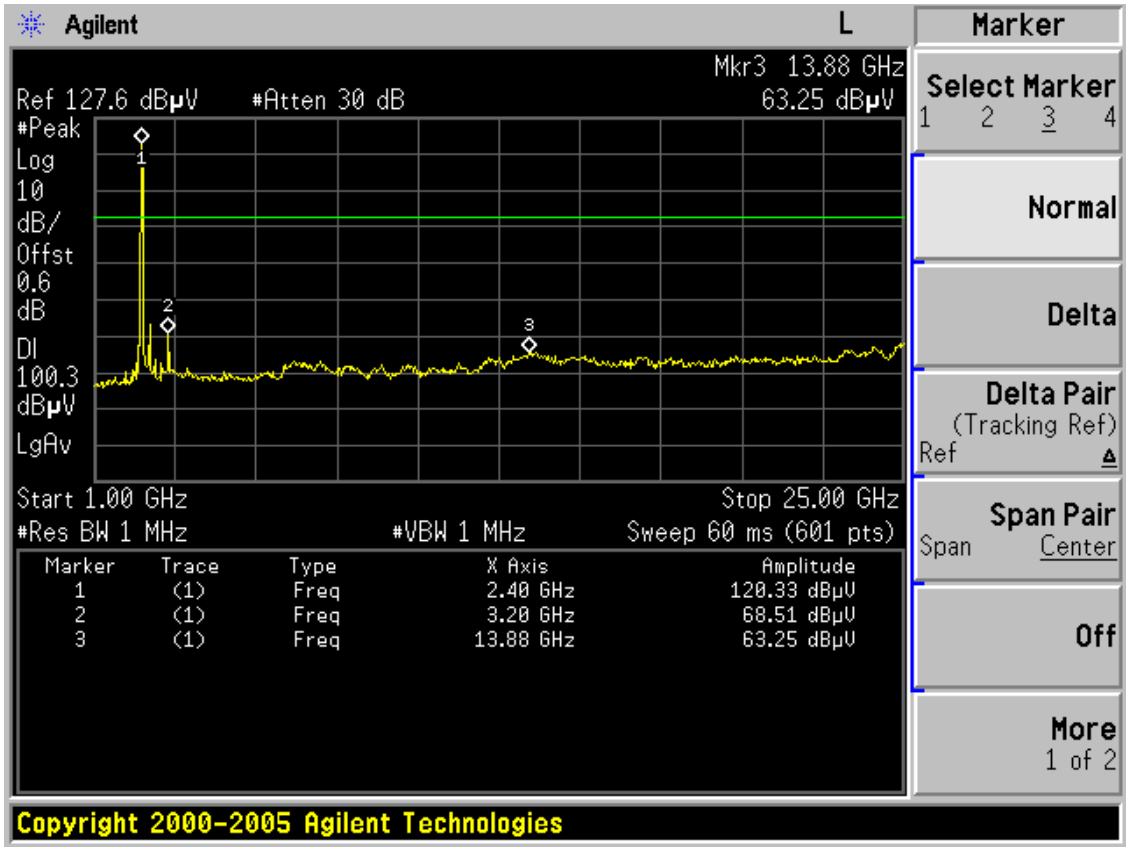


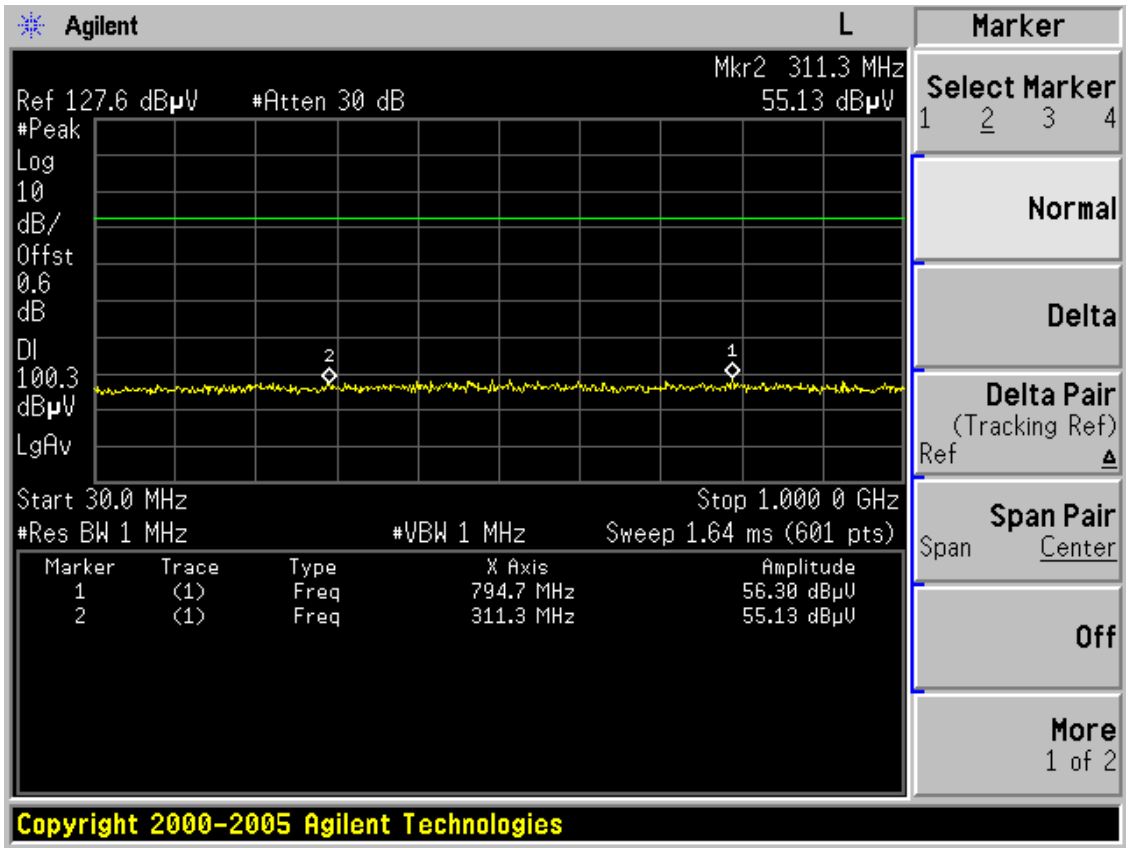
Test CH11: 2462MHz



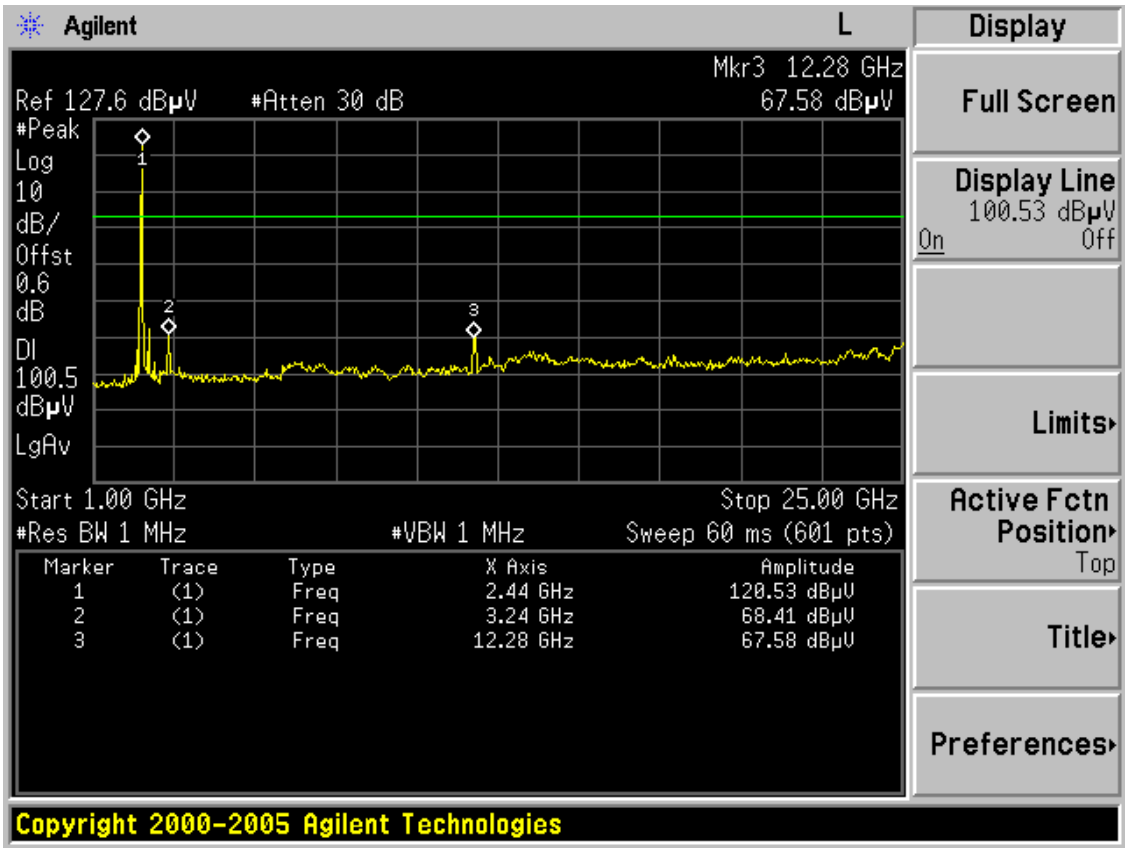


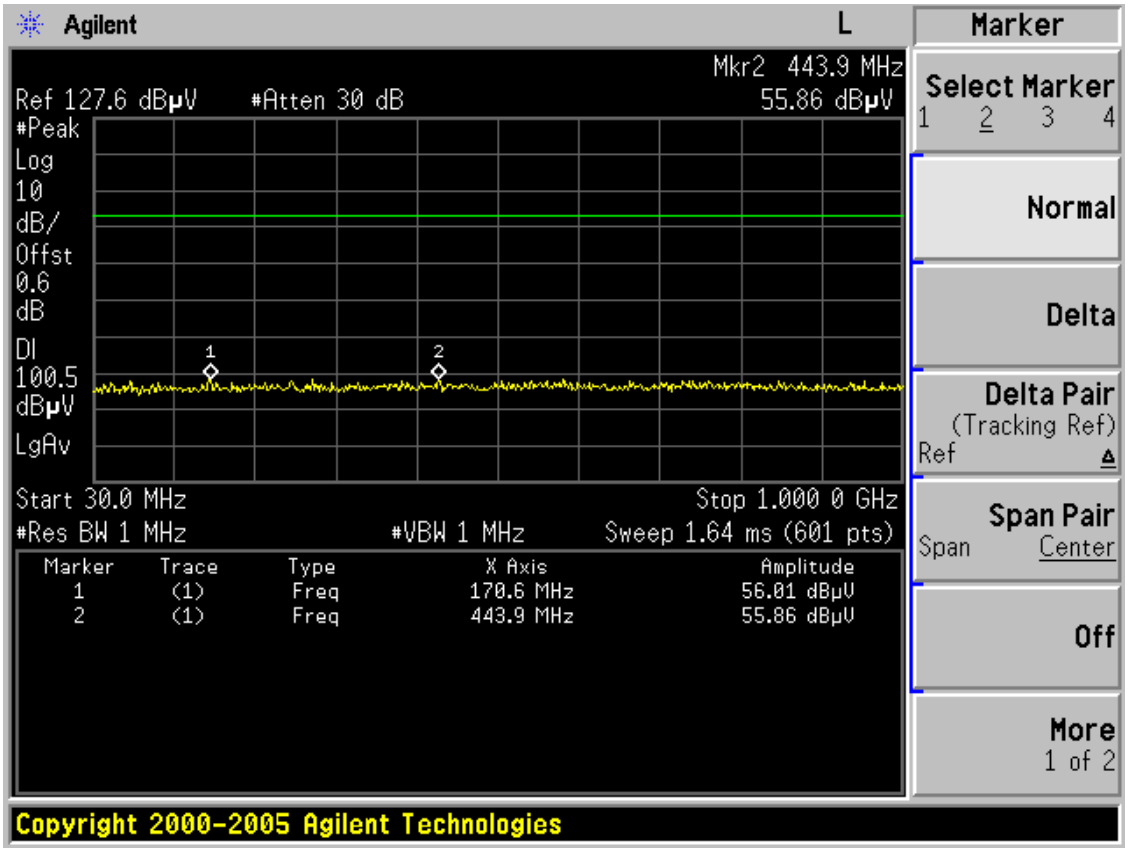
Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz



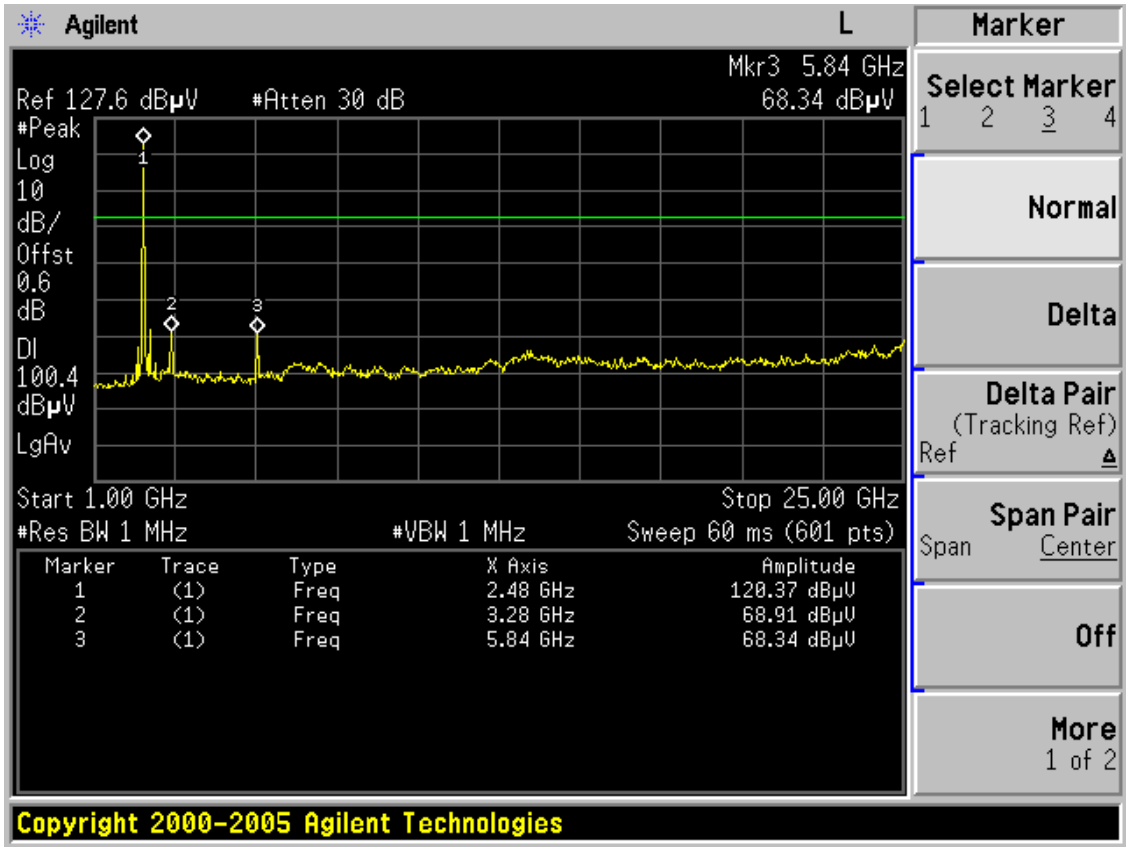


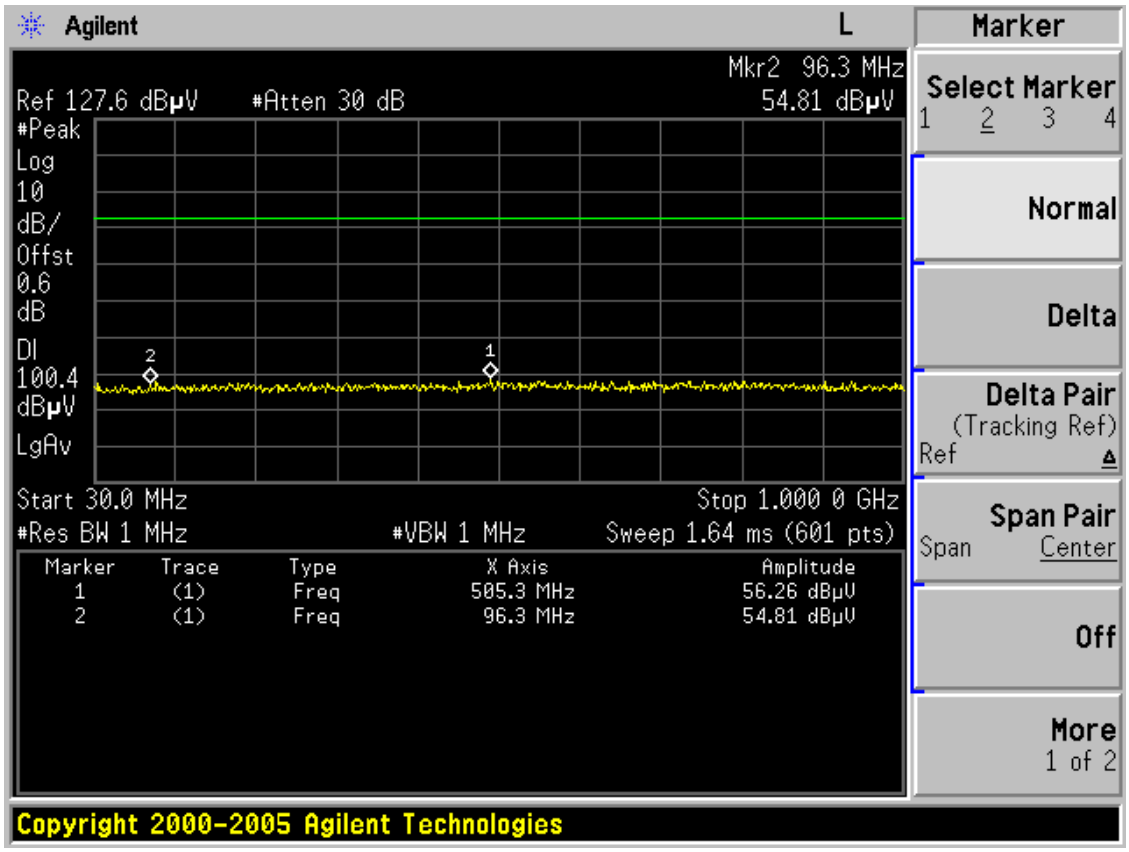
Test CH6: 2437MHz





Test CH11: 2462MHz





6. BAND EDGE COMPLIANCE TEST

6.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4446A	US44300459	May,10, 08	1 Year
2	Horn Antenna	EMCO	3115	9607-4877	May, 27, 08	1.5 Year
3	Amplifier	Agilent	8449B	3008A02495	Nov 6.08	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX 102	28620/2	May,28, 08	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX 102	271471/4	May,28, 08	1 Year
6	RF Cable	Hubersuhner	SUCOFLEX 102	29086/2	May,28, 08	1 Year

6.2.Limit

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

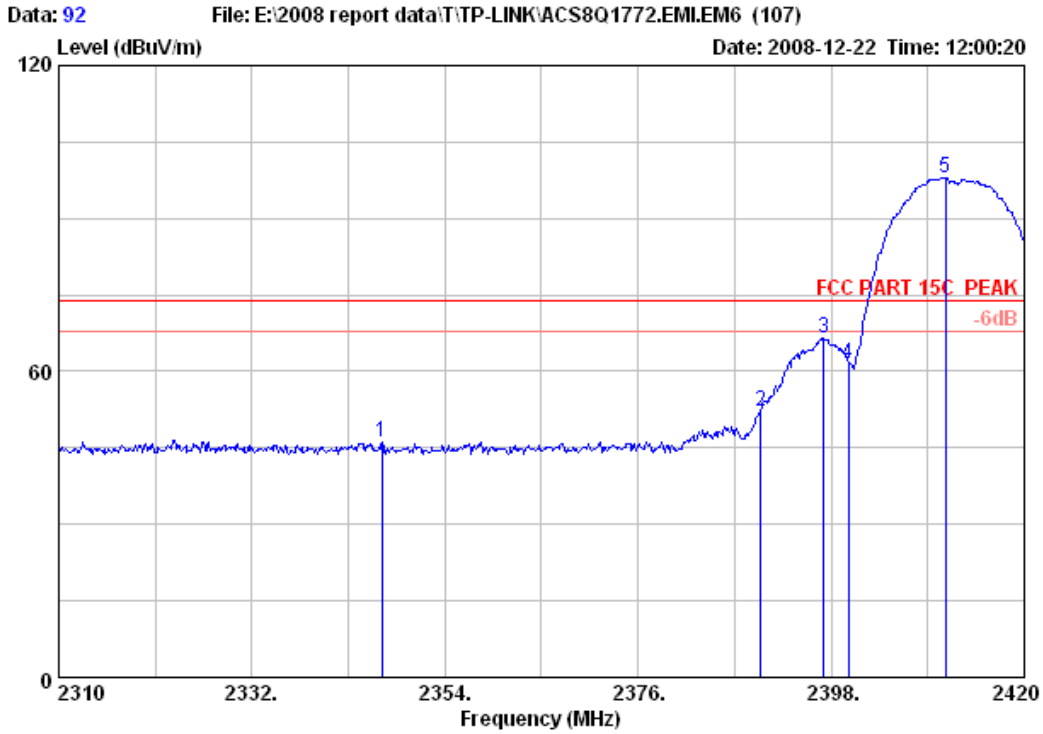
6.3.Test Produce

1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upperband-edges of the emission:
   (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
   (b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO

6.4.Test Results

Pass (The testing data was attached in the next pages.)

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

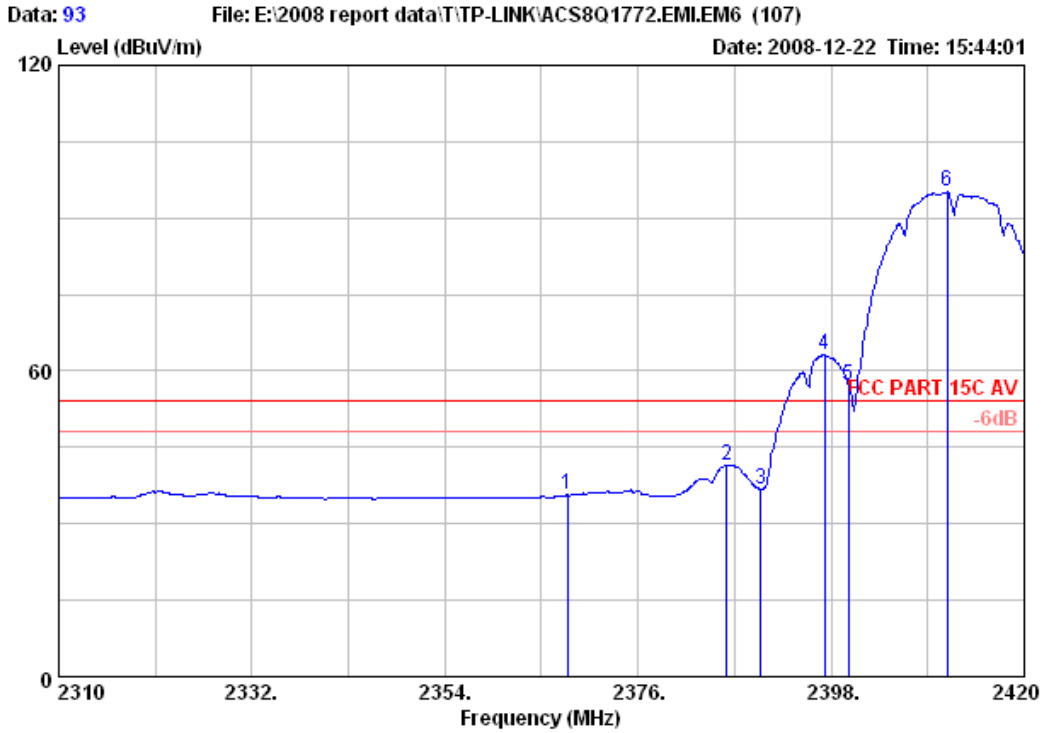


Site no. : 3# Chamber Data no. : 92
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : S Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH1 2412MHz
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2346.850	28.38	6.67	35.99	46.91	45.97	74.00	28.03	Peak
2	2390.000	28.46	6.71	35.95	53.05	52.27	74.00	21.73	Peak
3	2397.120	28.46	6.73	35.95	67.23	66.47	74.00	7.53	Peak
4	2400.000	28.46	6.73	35.95	62.41	61.65	74.00	12.35	Peak
5	2410.980	28.48	6.73	35.95	98.60	97.86	74.00	-23.86	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

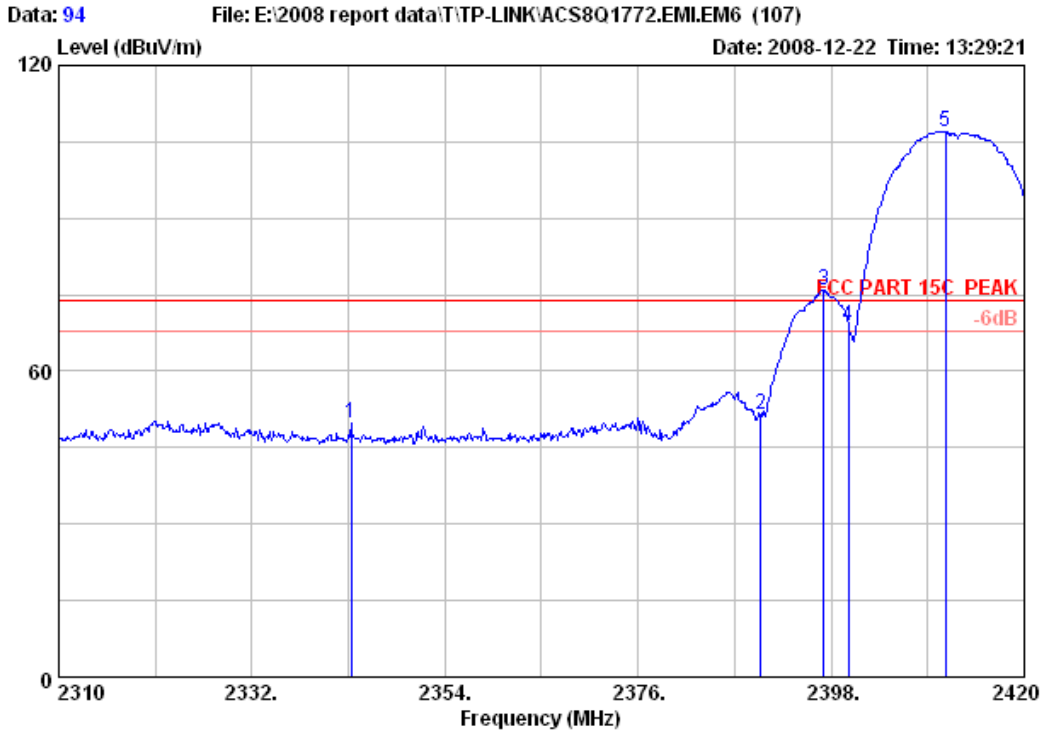


Site no. : 3# Chamber Data no. : 93
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH1 2412MHz
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2367.970	28.41	6.69	35.97	36.49	35.62	54.00	18.38	Average
2	2386.120	28.46	6.71	35.97	42.39	41.59	54.00	12.41	Average
3	2390.000	28.46	6.71	35.95	37.44	36.66	54.00	17.34	Average
4	2397.230	28.46	6.73	35.95	63.90	63.14	54.00	-9.14	Average
5	2400.000	28.46	6.73	35.95	57.81	57.05	54.00	-3.05	Average
6	2411.200	28.48	6.73	35.95	95.85	95.11	54.00	-41.11	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

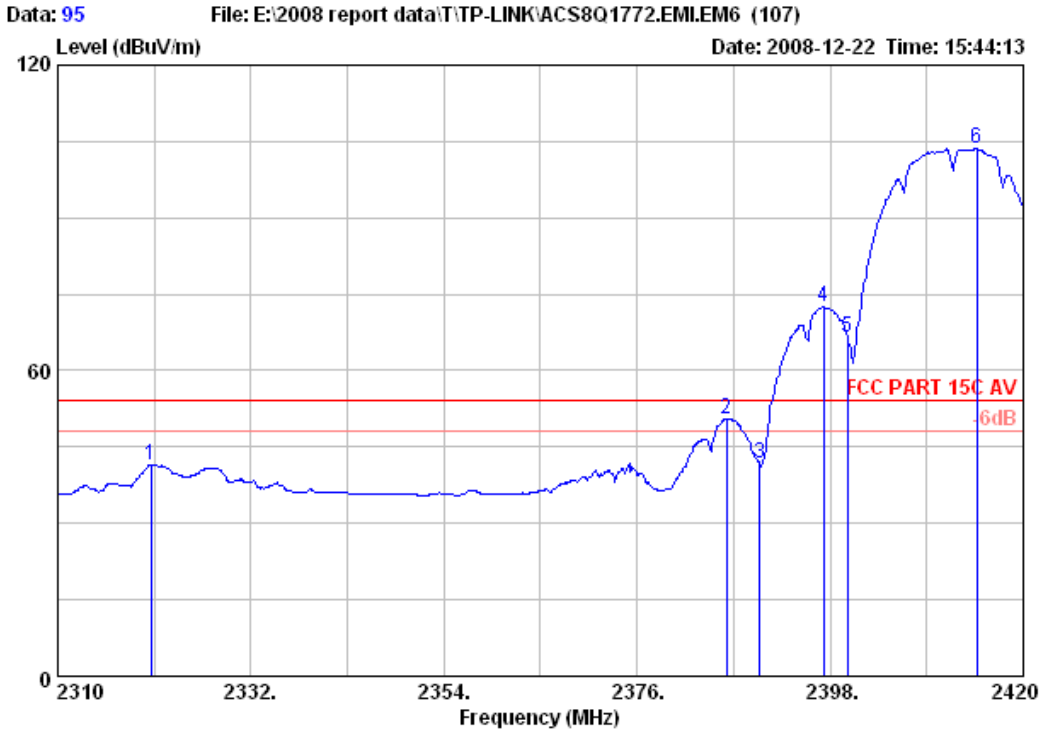


Site no. : 3# Chamber Data no. : 94
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH1 2412MHz
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2343.330	28.38	6.67	35.99	50.90	49.96	74.00	24.04	Peak
2	2390.000	28.46	6.71	35.95	52.33	51.55	74.00	22.45	Peak
3	2397.120	28.46	6.73	35.95	76.62	75.86	74.00	-1.86	Peak
4	2400.000	28.46	6.73	35.95	69.63	68.87	74.00	5.13	Peak
5	2410.980	28.48	6.73	35.95	107.83	107.09	74.00	-33.09	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

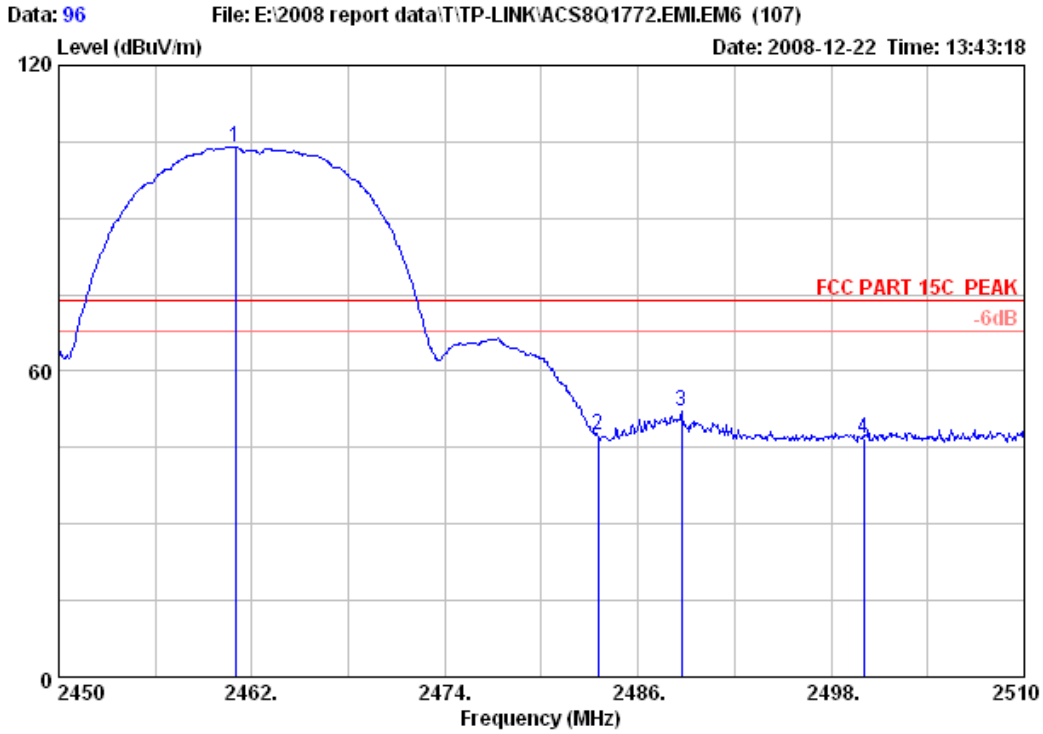


Site no. : 3# Chamber Data no. : 95
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH1 2412MHz
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2320.670	28.36	6.65	36.00	42.58	41.59	54.00	12.41	Average
2	2386.230	28.46	6.71	35.97	51.38	50.58	54.00	3.42	Average
3	2390.000	28.46	6.71	35.95	42.70	41.92	54.00	12.08	Average
4	2397.230	28.46	6.73	35.95	73.24	72.48	54.00	-18.48	Average
5	2400.000	28.46	6.73	35.95	67.42	66.66	54.00	-12.66	Average
6	2414.720	28.48	6.77	35.95	104.26	103.56	54.00	-49.56	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

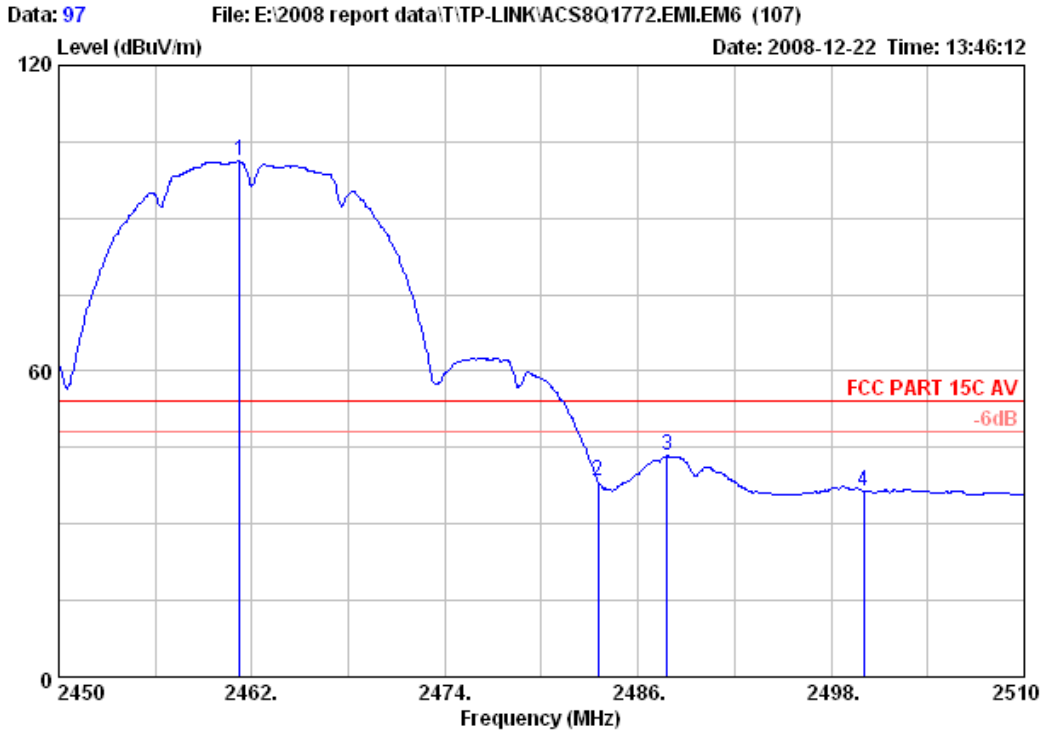


Site no. : 3# Chamber Data no. : 96
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH11 2462MHz
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.980	28.55	6.84	35.96	104.61	104.04	74.00	-30.04	Peak
2	2483.500	28.58	6.87	35.96	47.86	47.35	74.00	26.65	Peak
3	2488.700	28.60	6.91	35.96	52.52	52.07	74.00	21.93	Peak
4	2500.000	28.60	6.91	35.96	47.11	46.66	74.00	27.34	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

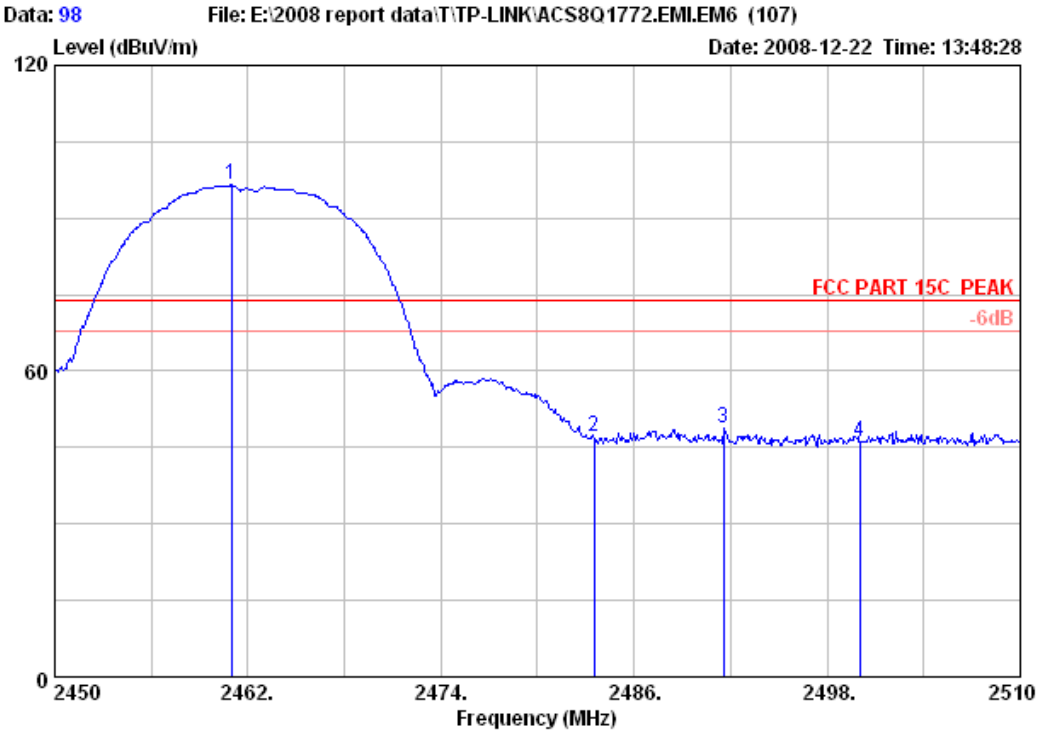


Site no. : 3# Chamber Data no. : 97
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH11 2462MHz
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.220	28.55	6.84	35.96	101.71	101.14	54.00	-47.14	Average
2	2483.500	28.58	6.87	35.96	39.02	38.51	54.00	15.49	Average
3	2487.800	28.60	6.87	35.96	43.79	43.30	54.00	10.70	Average
4	2500.000	28.60	6.91	35.96	36.99	36.54	54.00	17.46	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

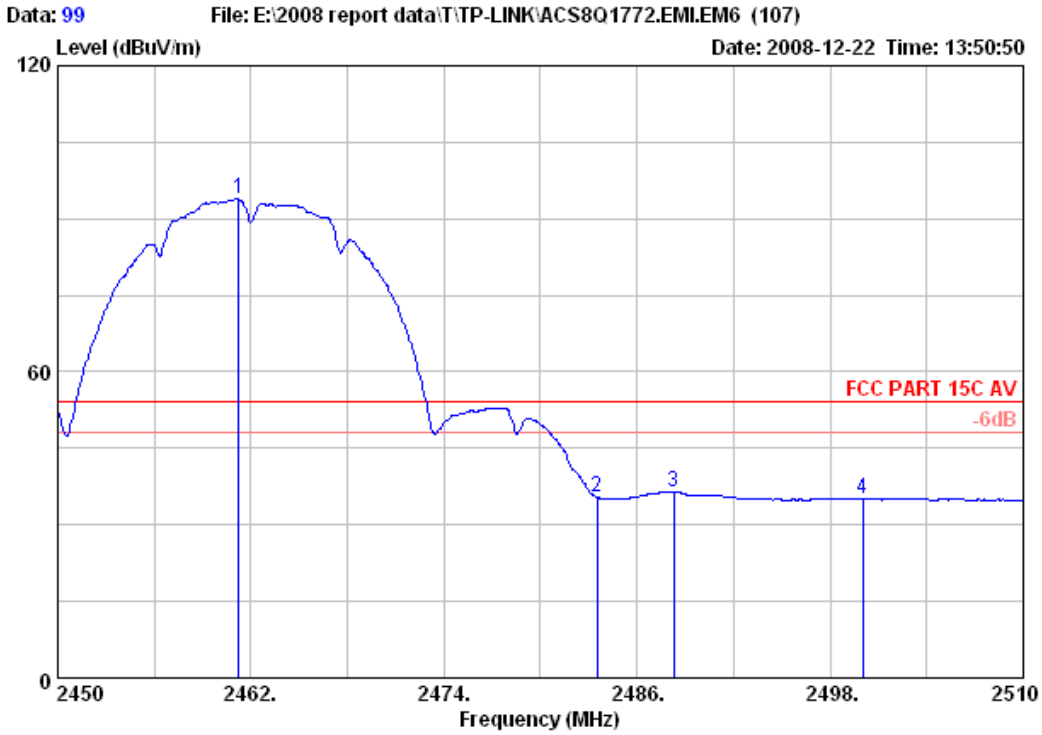


Site no. : 3# Chamber Data no. : 98
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH11 2462MHz
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.980	28.55	6.84	35.96	97.06	96.49	74.00	-22.49	Peak
2	2483.500	28.58	6.87	35.96	47.49	46.98	74.00	27.02	Peak
3	2491.580	28.60	6.91	35.96	49.20	48.75	74.00	25.25	Peak
4	2500.000	28.60	6.91	35.96	46.42	45.97	74.00	28.03	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

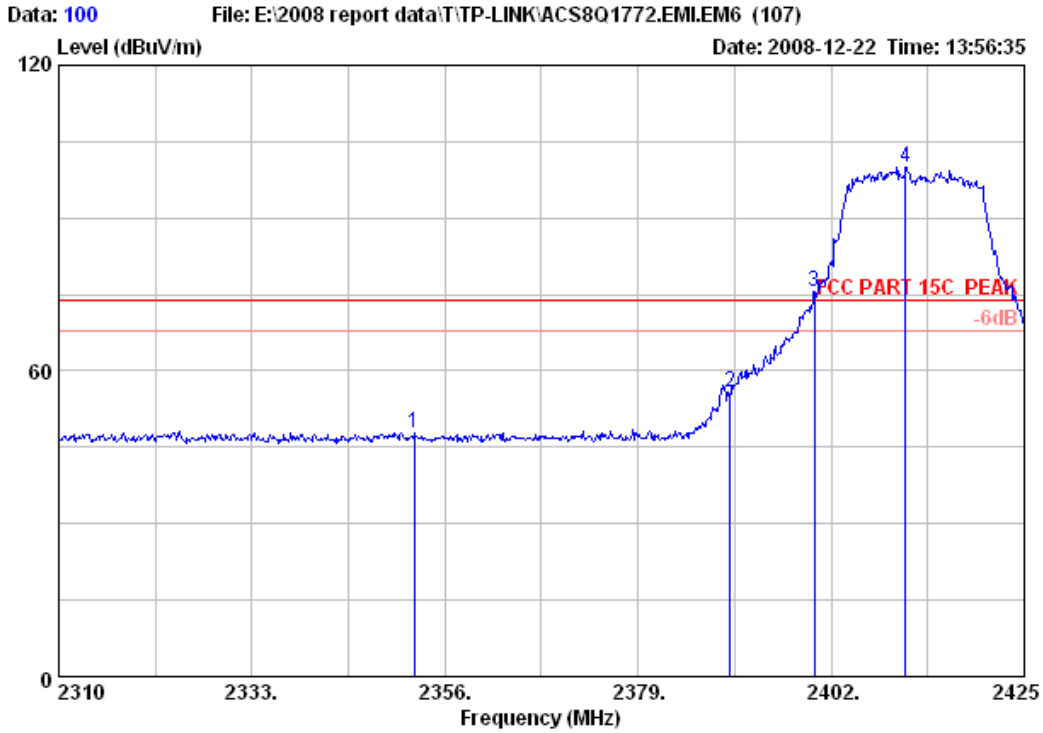


Site no. : 3# Chamber Data no. : 99
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH11 2462MHz
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.220	28.55	6.84	35.96	94.50	93.93	54.00	-39.93	Average
2	2483.500	28.58	6.87	35.96	35.92	35.41	54.00	18.59	Average
3	2488.280	28.60	6.91	35.96	37.02	36.57	54.00	17.43	Average
4	2500.000	28.60	6.91	35.96	35.46	35.01	54.00	18.99	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

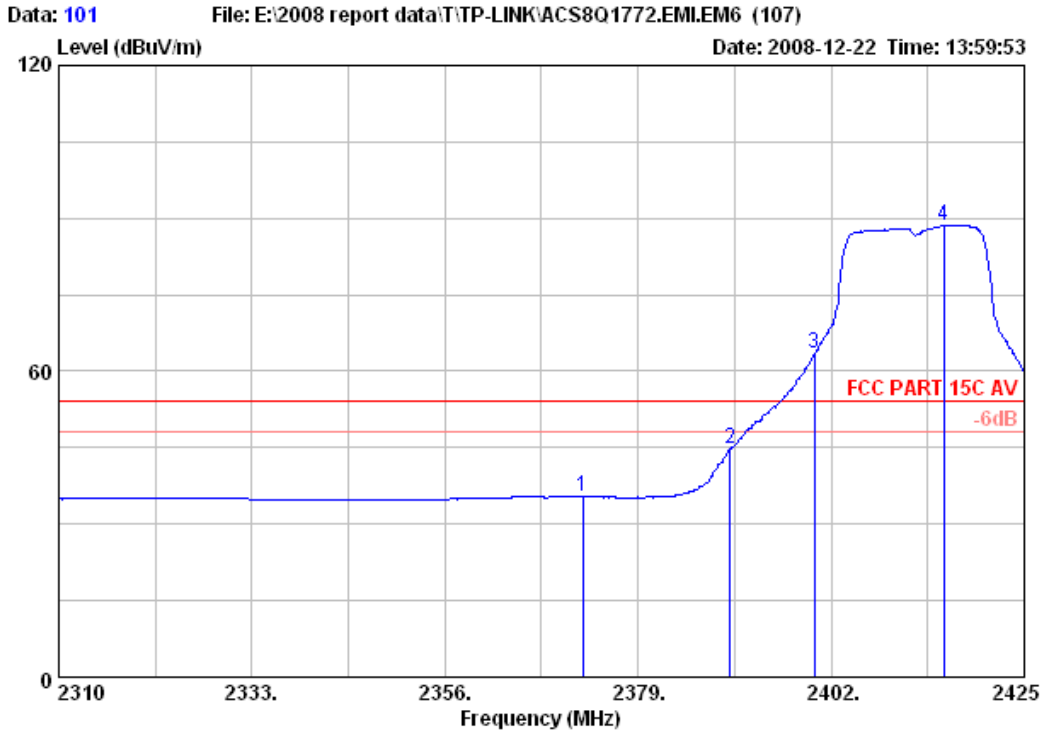


Site no. : 3# Chamber Data no. : 100
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH1 2412MHz
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2352.320	28.41	6.67	35.99	48.84	47.93	74.00	26.07	Peak
2	2390.000	28.46	6.71	35.95	56.65	55.87	74.00	18.13	Peak
3	2400.000	28.46	6.73	35.95	76.37	75.61	74.00	-1.61	Peak
4	2410.855	28.48	6.73	35.95	100.75	100.01	74.00	-26.01	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

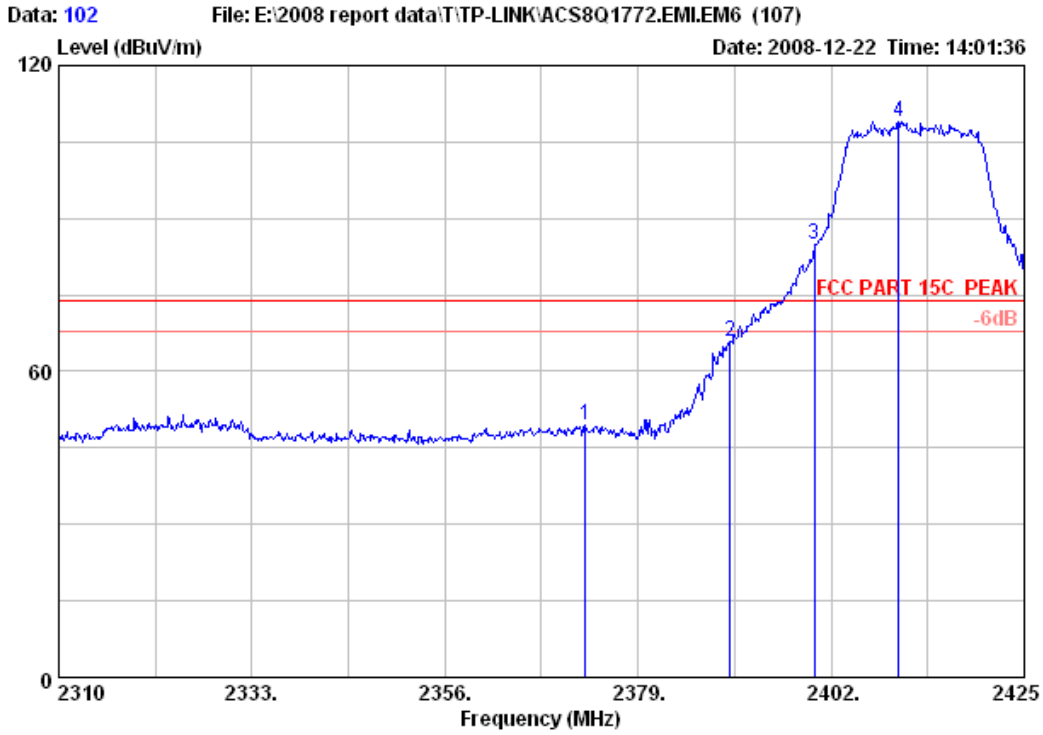


Site no. : 3# Chamber Data no. : 101
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH1 2412MHz
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2372.445	28.43	6.69	35.97	36.20	35.35	54.00	18.65	Average
2	2390.000	28.46	6.71	35.95	45.71	44.93	54.00	9.07	Average
3	2400.000	28.46	6.73	35.95	64.29	63.53	54.00	-9.53	Average
4	2415.455	28.48	6.77	35.95	89.43	88.73	54.00	-34.73	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

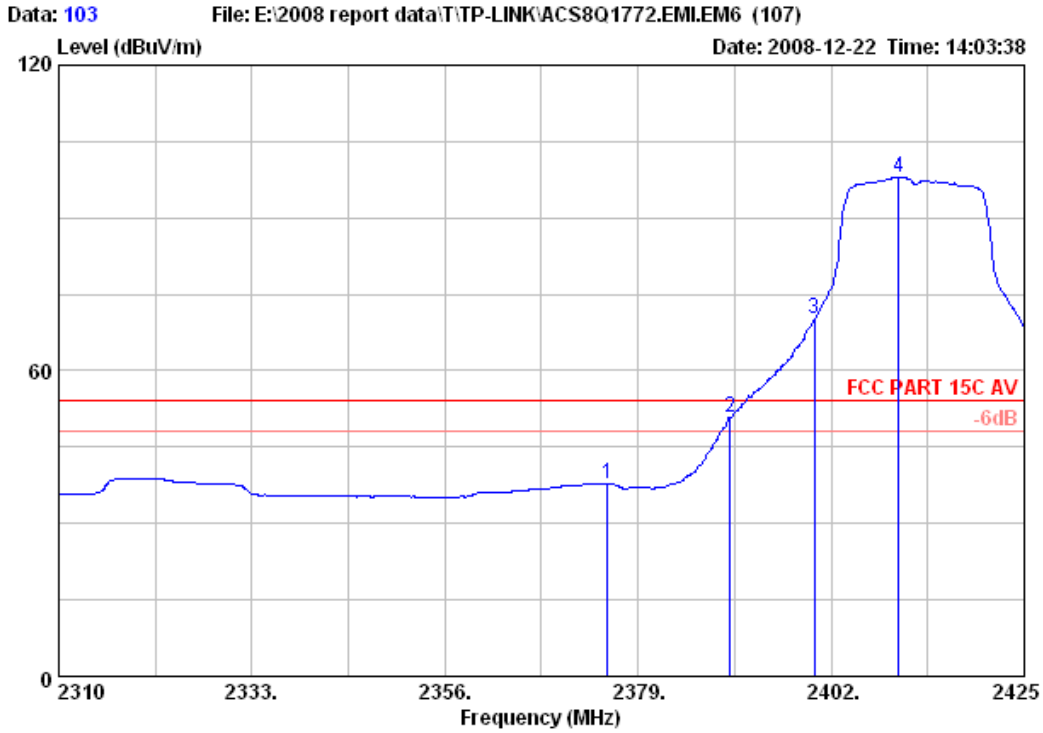


Site no. : 3# Chamber Data no. : 102
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH1 2412MHz
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2372.675	28.43	6.69	35.97	50.19	49.34	74.00	24.66	Peak
2	2390.000	28.46	6.71	35.95	66.62	65.84	74.00	8.16	Peak
3	2400.000	28.46	6.73	35.95	85.53	84.77	74.00	-10.77	Peak
4	2410.050	28.48	6.73	35.95	109.84	109.10	74.00	-35.10	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

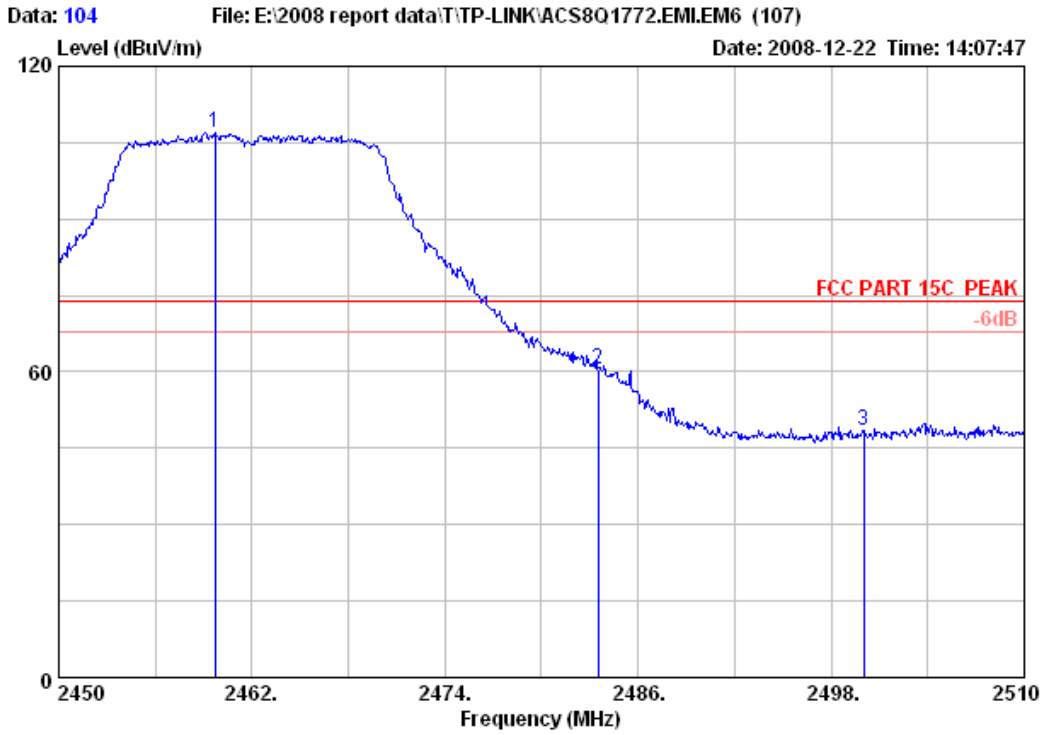


Site no. : 3# Chamber Data no. : 103
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH1 2412MHz
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2375.320	28.43	6.71	35.97	38.64	37.81	54.00	16.19	Average
2	2390.000	28.46	6.71	35.95	51.66	50.88	54.00	3.12	Average
3	2400.000	28.46	6.73	35.95	71.08	70.32	54.00	-16.32	Average
4	2410.050	28.48	6.73	35.95	98.77	98.03	54.00	-44.03	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

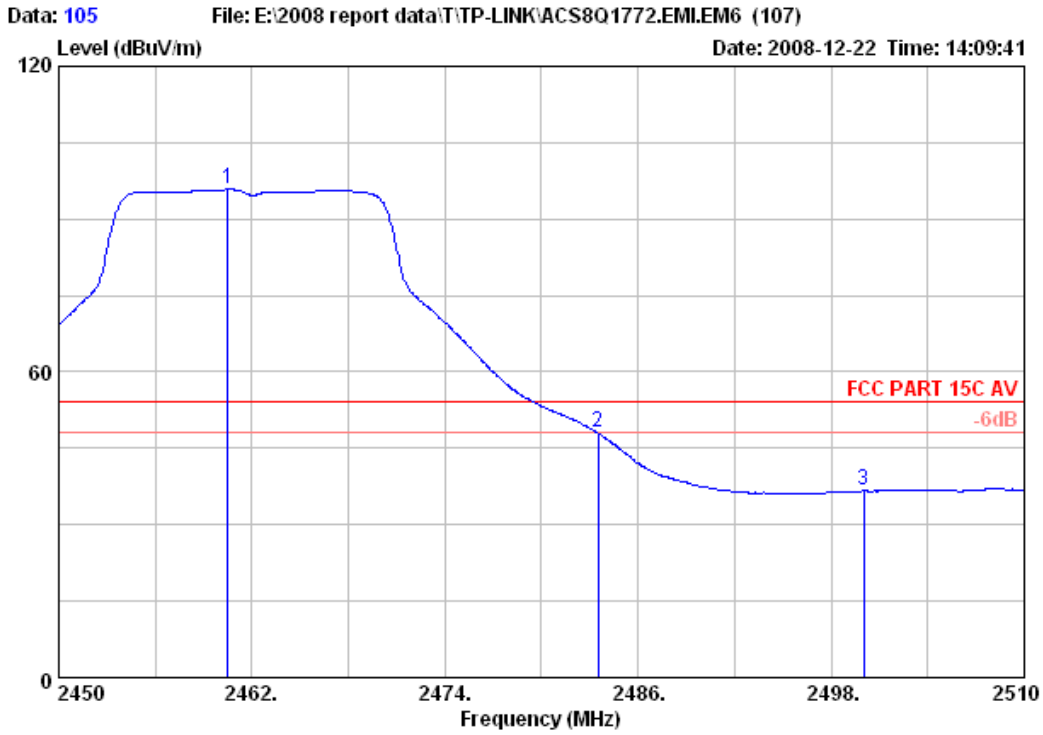


Site no. : 3# Chamber Data no. : 104
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH11 2462MHz
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2459.720	28.55	6.84	35.96	107.52	106.95	74.00	-32.95	Peak
2	2483.500	28.58	6.87	35.96	61.09	60.58	74.00	13.42	Peak
3	2500.000	28.60	6.91	35.96	48.83	48.38	74.00	25.62	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

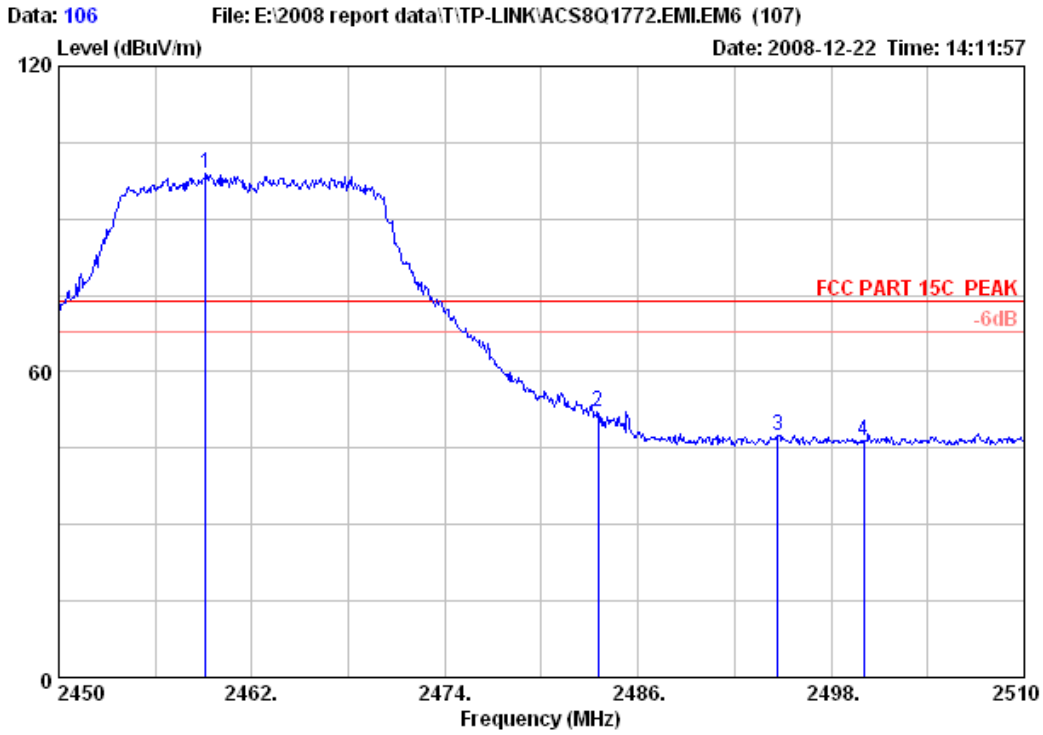


Site no. : 3# Chamber Data no. : 105
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH11 2462MHz
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.500	28.55	6.84	35.96	96.39	95.82	54.00	-41.82	Average
2	2483.500	28.58	6.87	35.96	48.51	48.00	54.00	6.00	Average
3	2500.000	28.60	6.91	35.96	37.08	36.63	54.00	17.37	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

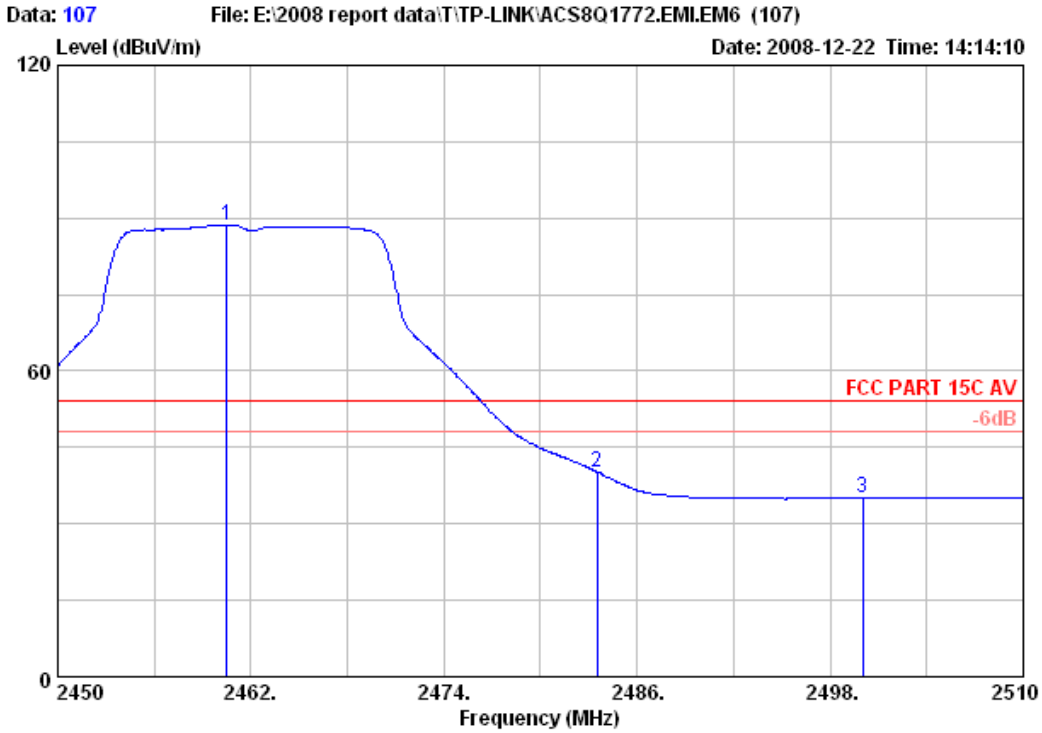


Site no. : 3# Chamber Data no. : 106
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH11 2462MHz
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2459.120	28.55	6.84	35.96	99.63	99.06	74.00	-25.06	Peak
2	2483.500	28.58	6.87	35.96	52.74	52.23	74.00	21.77	Peak
3	2494.700	28.60	6.91	35.96	48.03	47.58	74.00	26.42	Peak
4	2500.000	28.60	6.91	35.96	46.85	46.40	74.00	27.60	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



Site no. : 3# Chamber Data no. : 107
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Sunny
EUT : 54M Wireless PCI Adapter
Power Rating : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11g CH11 2462MHz
Memo : M/N:TL-WN350GD

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.500	28.55	6.84	35.96	89.21	88.64	54.00	-34.64	Average
2	2483.500	28.58	6.87	35.96	40.76	40.25	54.00	13.75	Average
3	2500.000	28.60	6.91	35.96	35.45	35.00	54.00	19.00	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

7. 6dB Bandwidth Test

7.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4446A	US44300459	May,10, 08	1 Year
2	Attenuator	Agilent	8491B	MY39262165	May,28, 08	1 Year
3	RF Cable	Hubersuhner	SUCOFLEX 102	28618/2	May,28, 08	1Year

7.2.Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

7.3.Test Procedure

The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 100 kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

7.4.Test Results

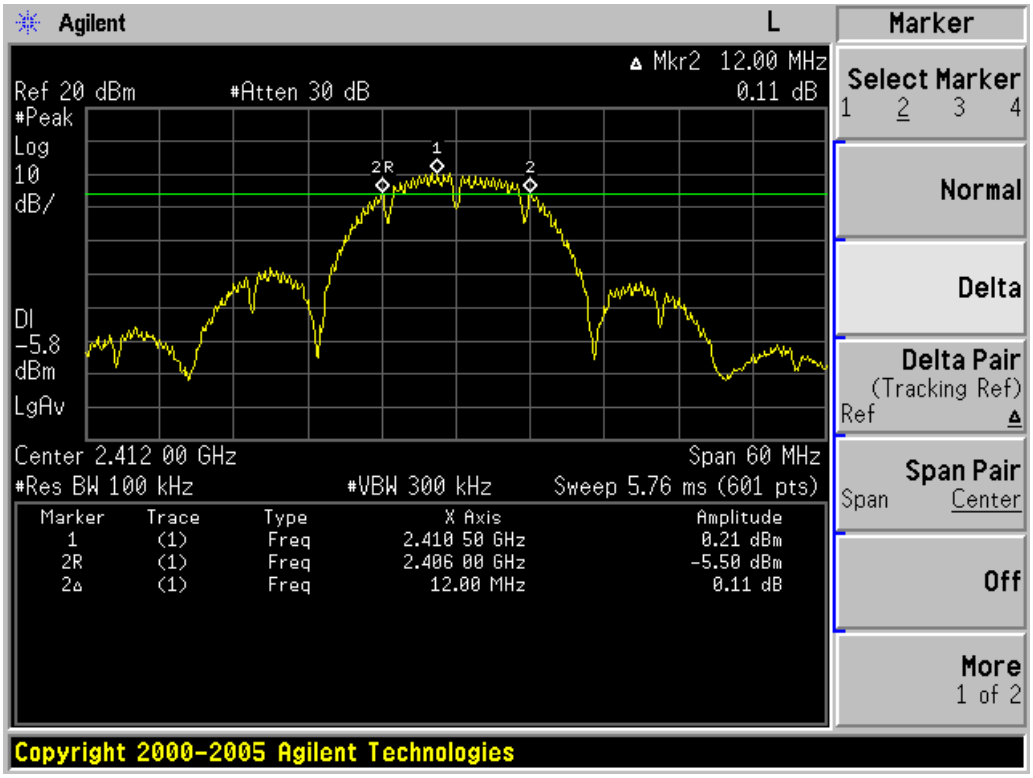
Test Mode: IEEE 802.11b TX

CH	6dB Bandwidth (MHz)	Limit	Conclusion
1	12.00	>500	PASS
6	12.00	>500	PASS
11	12.50	>500	PASS

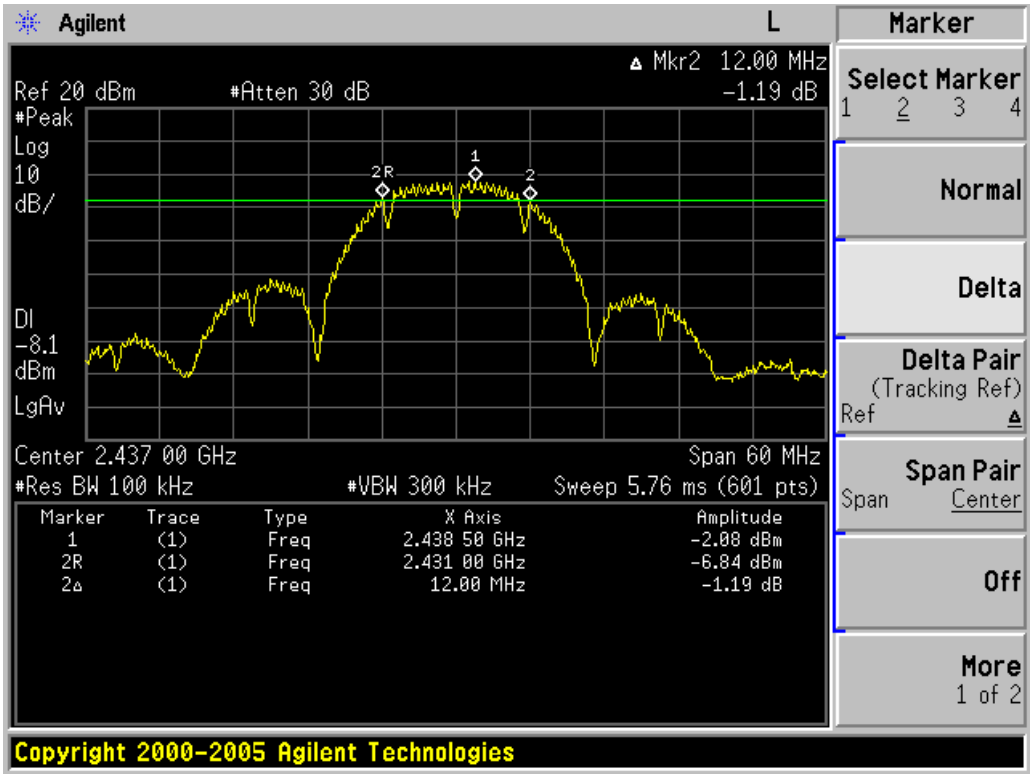
Test Mode: IEEE 802.11g TX

CH	6dB Bandwidth (MHz)	Limit	Conclusion
1	16.40	>500	PASS
6	16.30	>500	PASS
11	16.10	>500	PASS

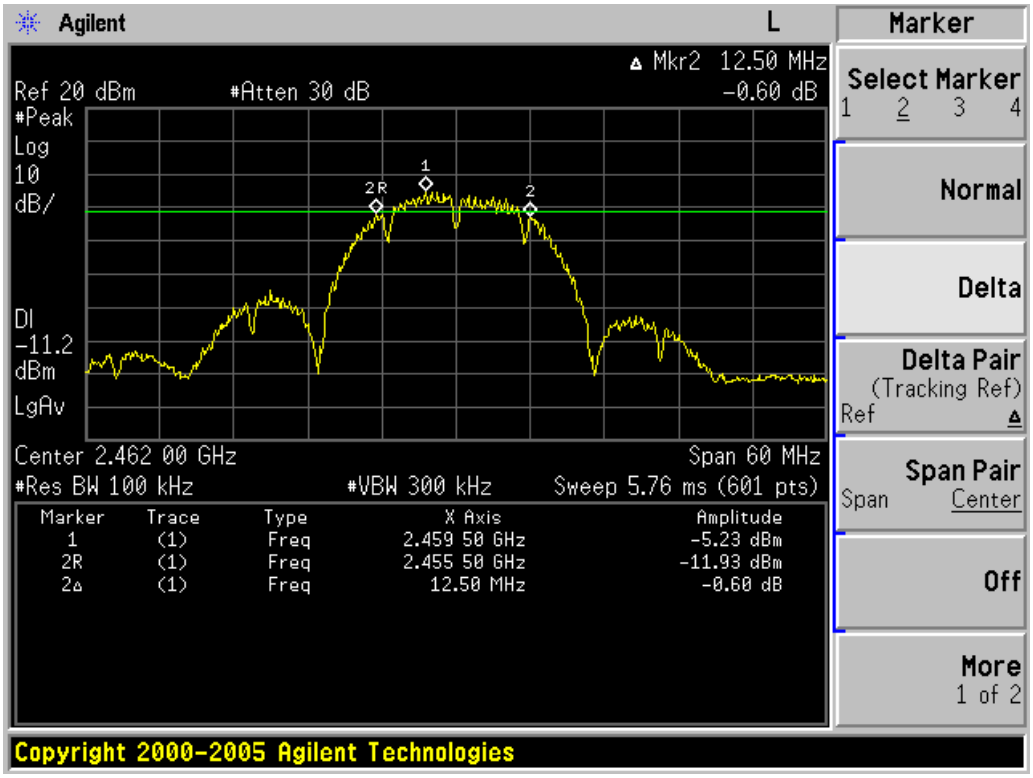
Test Mode: IEEE 802.11b TX
Test CH1: 2412MHz



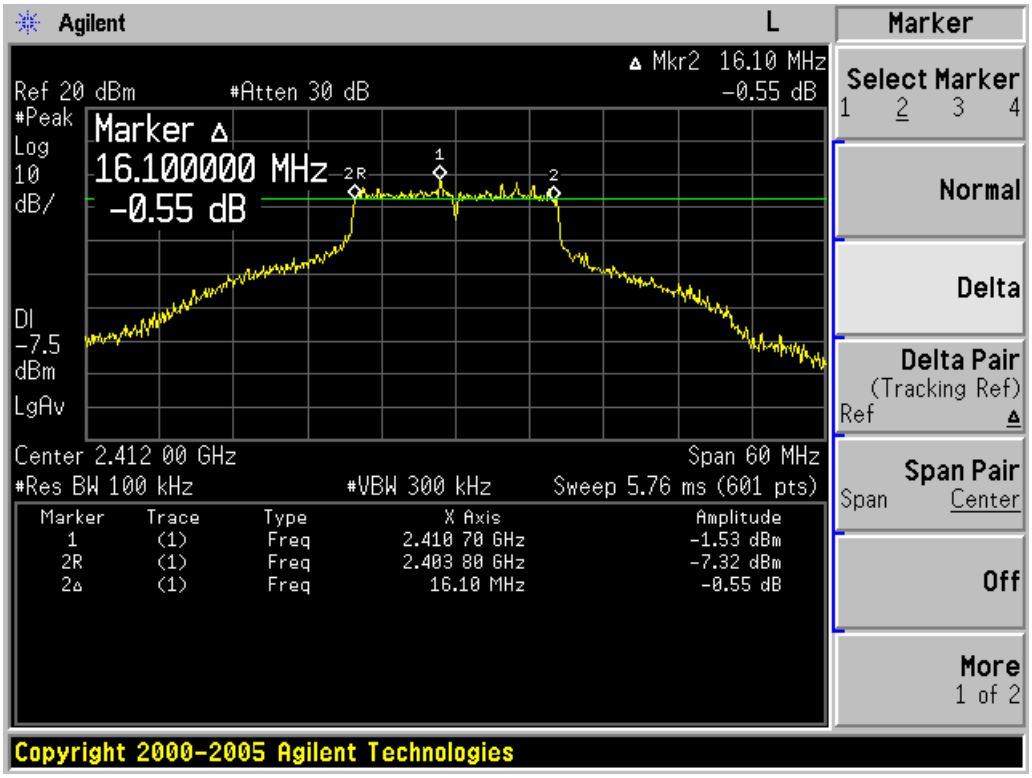
Test CH6: 2437MHz



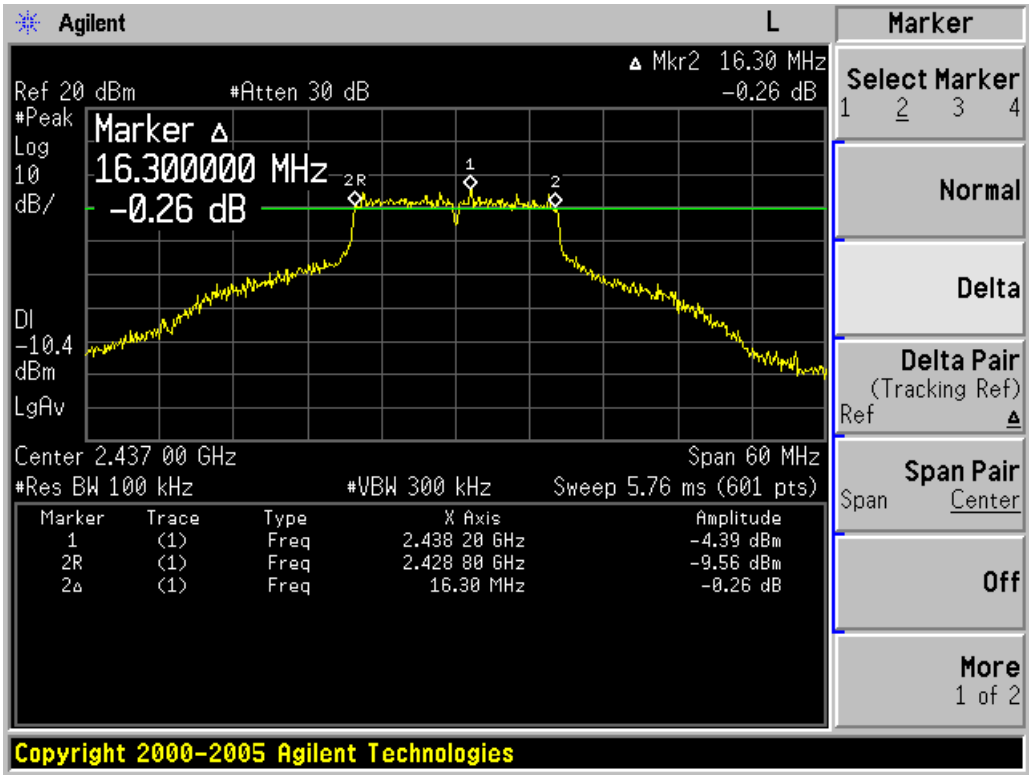
Test CH11: 2462MHz



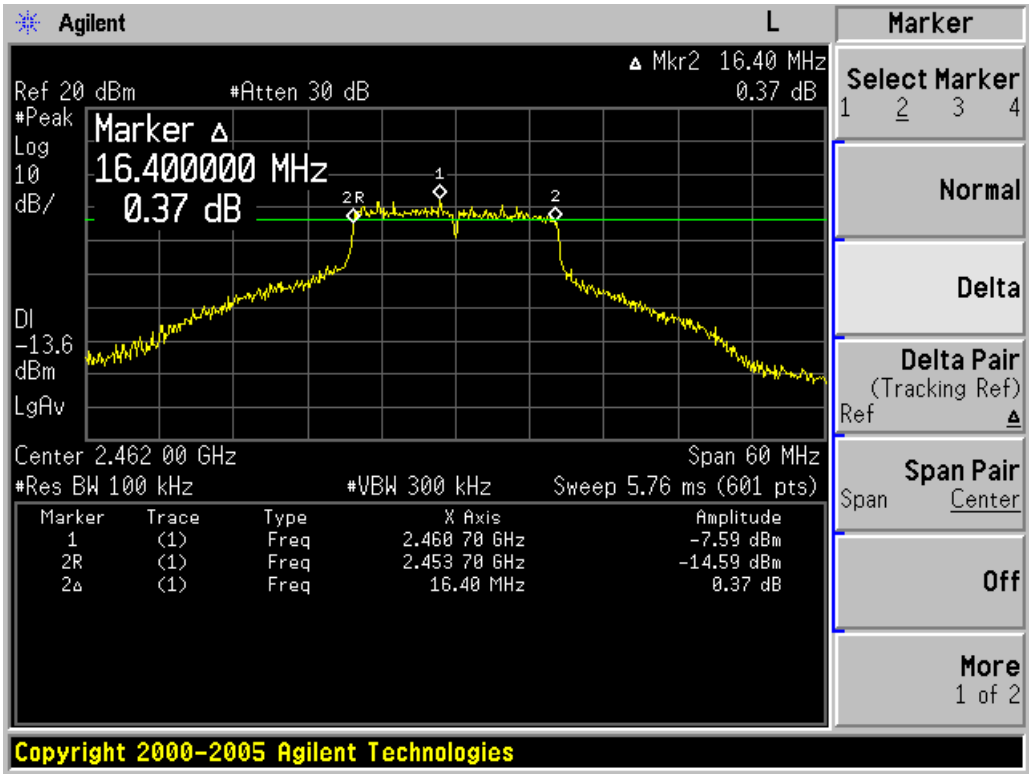
Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz



Test CH6: 2437MHz



Test CH11: 2462MHz



8. OUTPUT POWER TEST

8.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4446A	US44300459	May,10, 08	1 Year
2	Attenuator	Agilent	8491B	MY39262165	May,28, 08	1 Year
3	Power meter	Anritsu	ML2487A	6K00002472	May,10, 08	1 Year
4	Power sensor	Anritsu	ML2491A	032516	May,10, 08	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX 102	28618/2	May,28, 08	1Year

8.2. Limit(FCC Part 15C 15.247 b(3))

For systems using digital modulation in the 2400—2483.5MHz, The Peak out put Power shall not exceed 1W(30dBm)

8.3.Test Procedure

The transmitter output was connected to a power meter, use the power meter to read out the peak out put power.

8.4.Test Results

EUT: 54M Wireless PCI Adapter MN:TL-WN350GD							
Power: DC 3.3V From PC input AC 120V/60Hz							
Data Rate:11b 1Mbps；11g：9Mbps；(Note 1)							
Ambient Temperature:23℃			Relative Humidity: 60%				
Test date:2008/12/21			Test site: RF site		Tested by: Sunny		
Test CH:CH1:2412MHz CH6:2437MHz CH11:2462MHz							
Mode	CH	PK Read (dBm)	Cable Loss (dBm)	Attenuator (dB)	Result (dBm)	Limit (dBm)	Conclusion
11b	CH1	-2.22	0.60	20.0	18.38	30.00	PASS
	CH6	0.36	0.60	20.0	20.96	30.00	PASS
	CH11	-2.47	0.60	20.0	18.13	30.00	PASS
11g	CH1	-0.47	0.60	20.0	20.13	30.00	PASS
	CH6	1.72	0.60	20.0	22.32	30.00	PASS
	CH11	0.52	0.60	20.0	21.12	30.00	PASS
Note1: According Exploratory test, These data rate have the maximum output power							
Result= read +cable loss + Attenuator							

9. POWER SPECTRAL DENSITY TEST

9.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4446A	US44300459	May,10, 08	1 Year
2	Attenuator	Agilent	8491B	MY39262165	May,28, 08	1 Year
3	RF Cable	Hubersuhner	SUCOFLEX 102	28618/2	May,28, 08	1Year

9.2.Limit

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

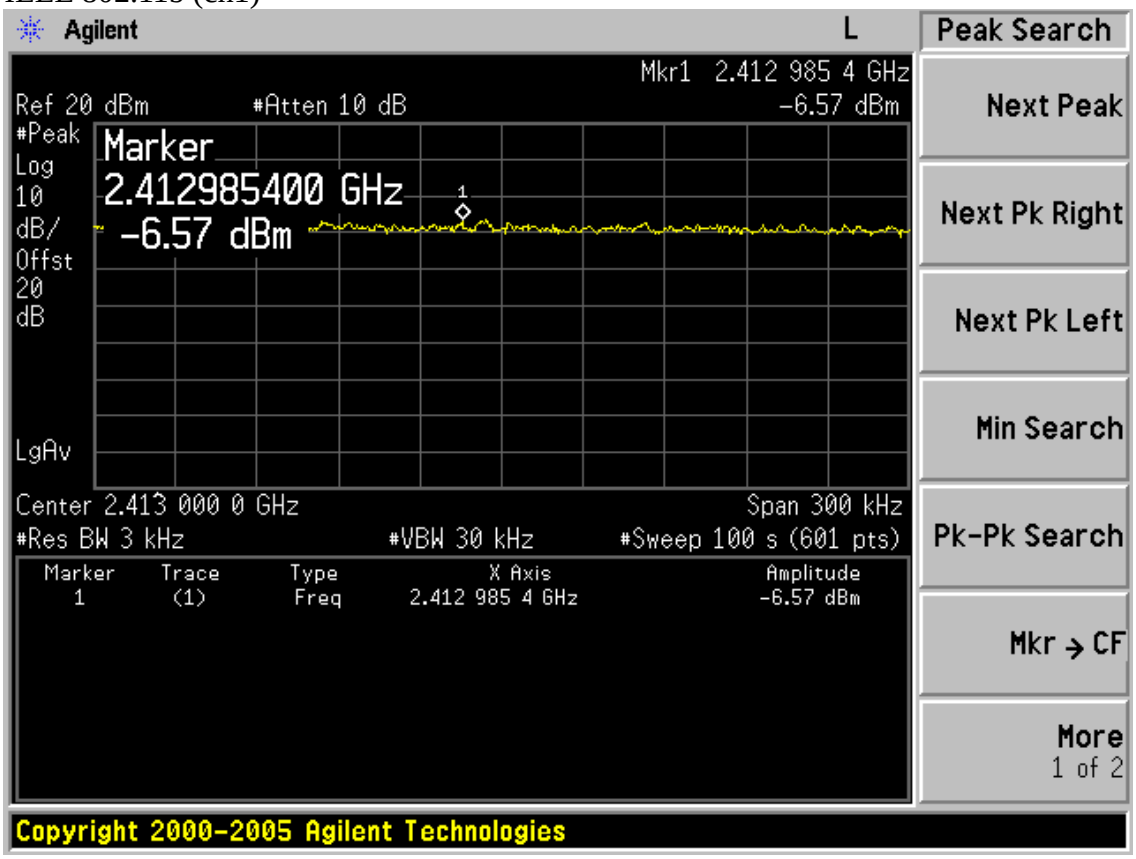
9.3.Test Procedure

The transmitter output was connected to a spectrum analyzer . The power density was measured by spectrum analyzer with 3kHz RBW and 30kHz VBW, sweep time=span/3kHz.

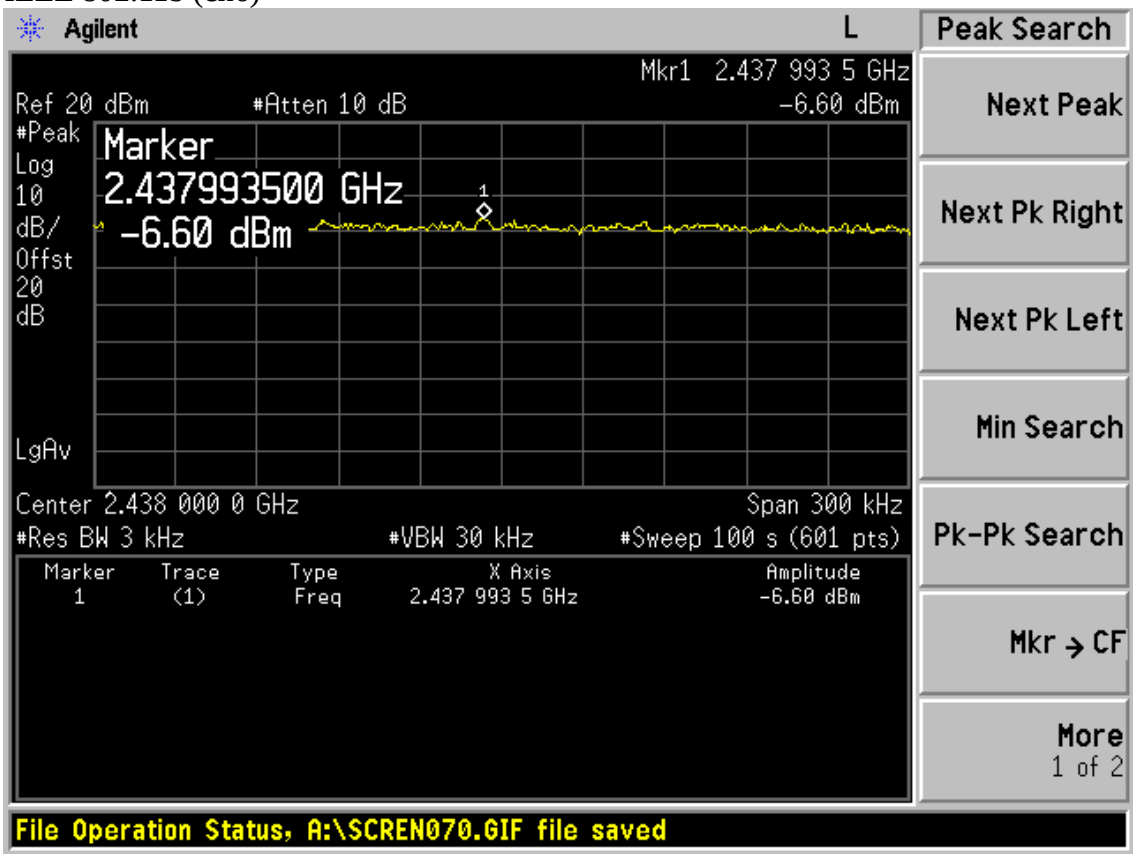
9.4.Test Results

EUT:54M Wireless PCI Adapter M/N:TL-WN350GD						
Power: DC 3.3V From PC input AC 120V/60Hz						
Data Rate:11b: 1Mbps；11g：9Mbps (Note 1)						
Ambient Temperature:23℃		Relative Humidity: 60%				
Test date:2008/12/17		Test site: RF site		Tested By: Sunny		
Test CH	CH1:2412MHz CH6:2437MHz CH11:2462MHz					
Mode	CH	Read(dBm)	Cable Loss(dB)	Result (dBm)	Limit(dBm)	Conclusion
11b	CH1	-6.57	0.6	-5.97	8.00	**Pass**
	CH6	-6.60	0.6	-6.00	8.00	**Pass**
	CH11	-5.84	0.6	-5.24	8.00	**Pass**
11g	CH1	-7.90	0.6	-7.30	8.00	**Pass**
	CH6	-7.35	0.6	-6.75	8.00	**Pass**
	CH11	-7.18	0.6	-6.58	8.00	**Pass**
Note1:According Exploratory test, These data rate have the maximum output power						
Note2:Result=Read+ cable loss						

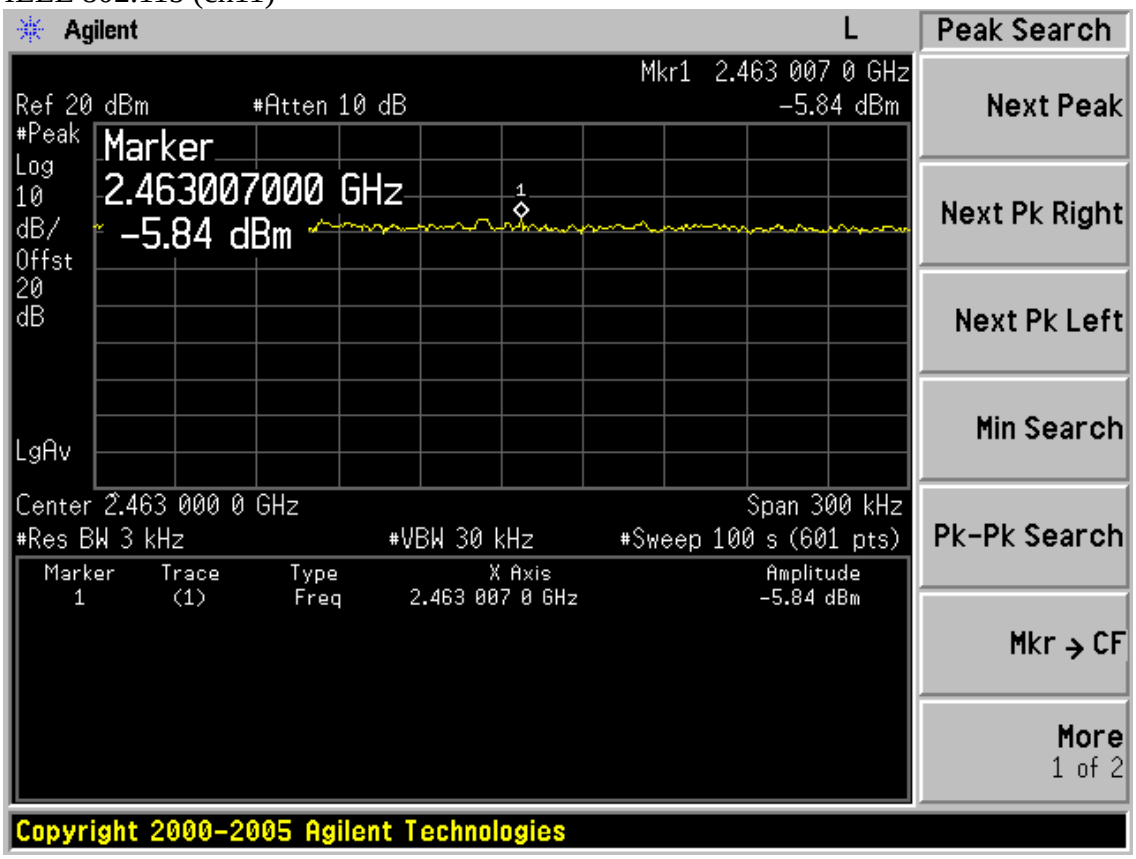
IEEE 802.11b (ch1)



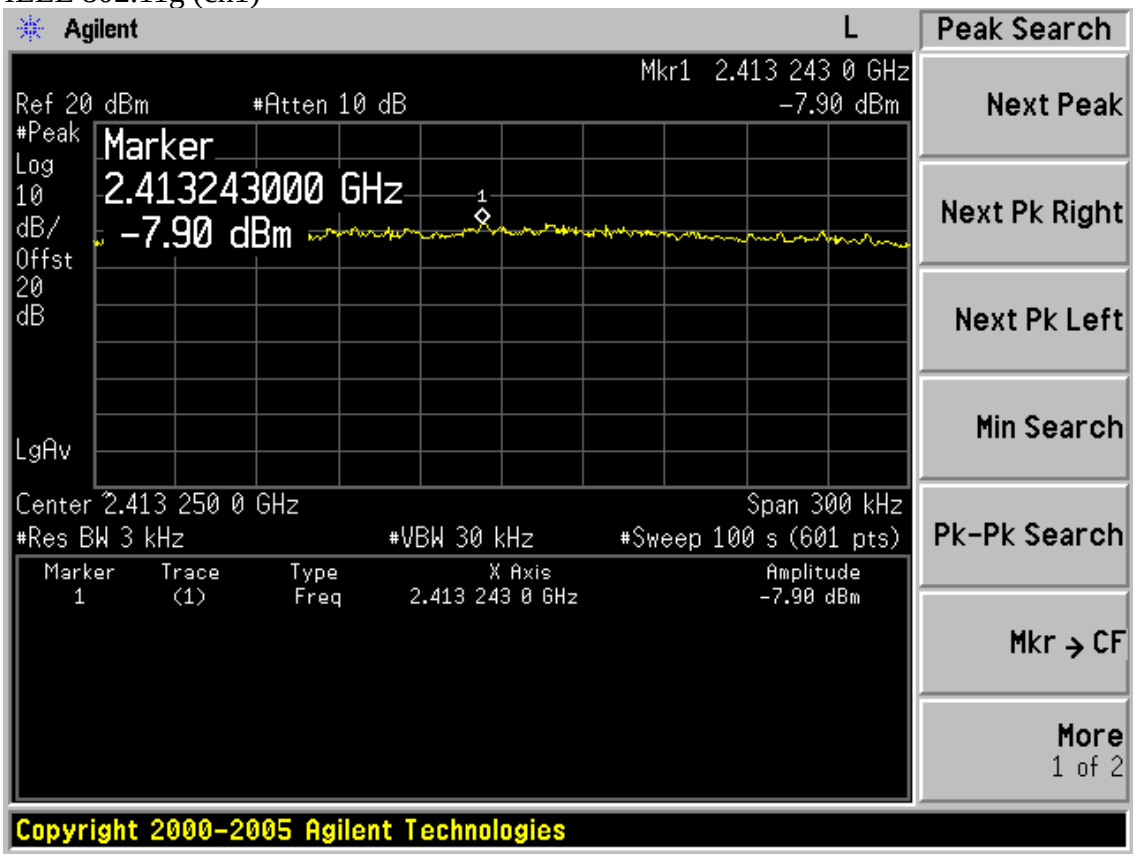
IEEE 802.11b (ch6)



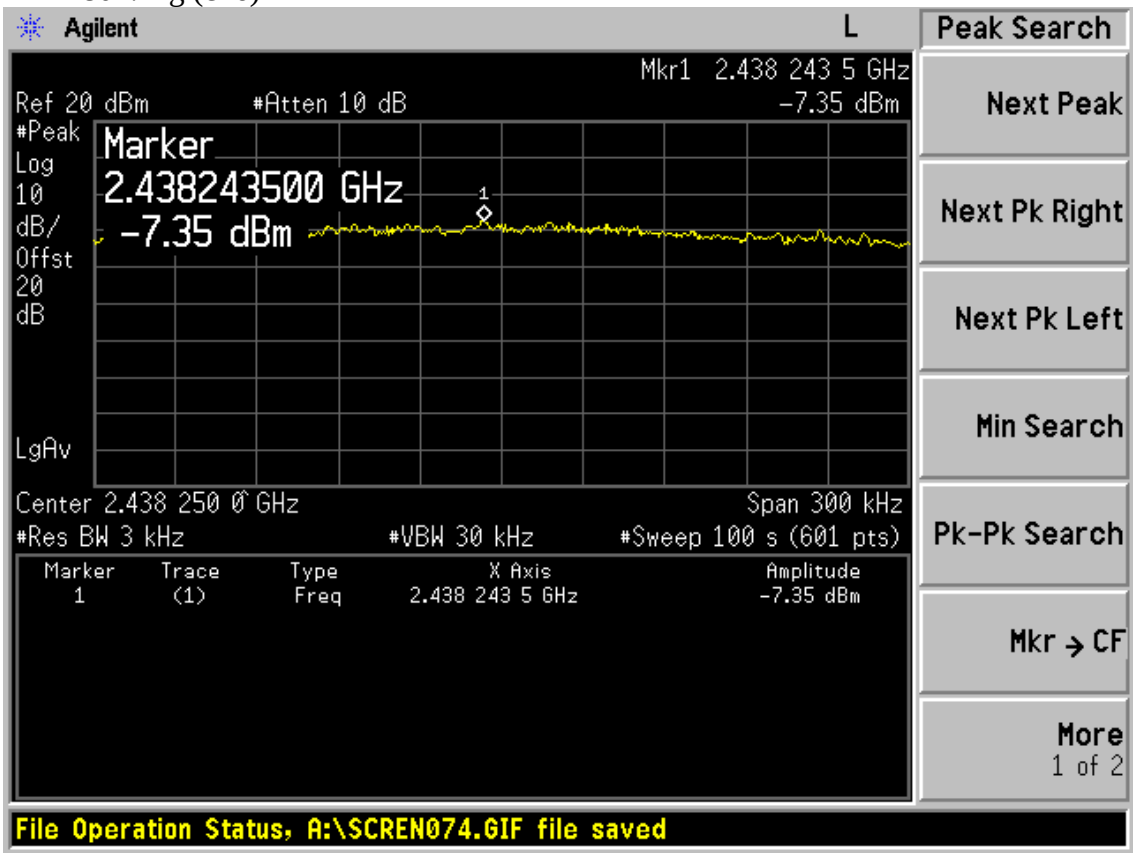
IEEE 802.11b (ch11)



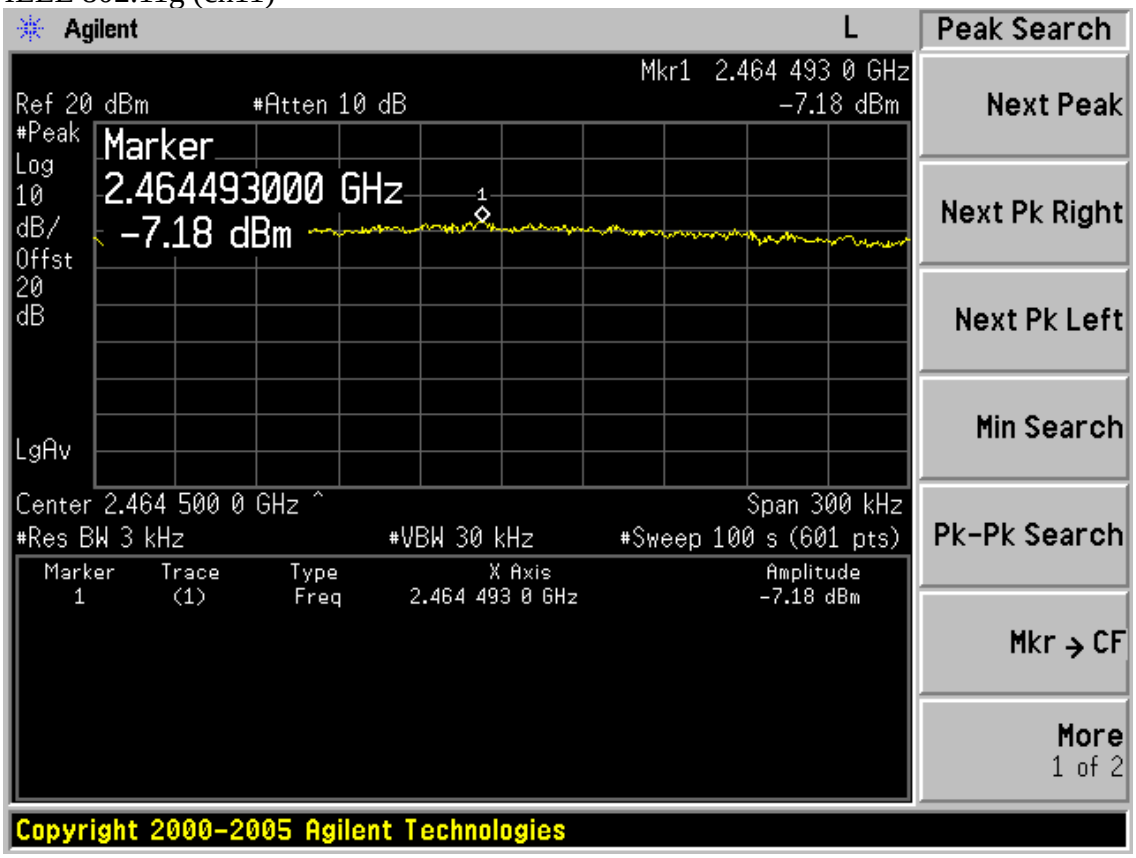
IEEE 802.11g (ch1)



IEEE 802.11g (ch6)



IEEE 802.11g (ch11)



10.MPE ESTIMATION

10.1.Limit for General Population / Uncontrolled Exposures

Frequency	Power density (mW/cm²)	Averaging time (minutes)
300MHz~1.5GHz	F/1500	30
1.5GHz~100GHz	1.0	30

Frequency (MHz)	Power density (mW/cm²)	Averaging time (minutes)
2412	1	30
2437	1	30
2462	1	30

Note: F = Frequency in MHz

10.2.Estimation Result

Mode	CH	Frequency (MHz)	PK Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (linear)	MPE
11b	1	2412	18.38	68.87	1.8	1.51	0.0207
	6	2437	20.96	124.74	1.8	1.51	0.0376
	11	2462	18.13	65.01	1.8	1.51	0.0196
11b	1	2412	20.13	103.04	1.8	1.51	0.0310
	6	2437	22.32	170.61	1.8	1.51	0.0514
	11	2462	21.12	129.42	1.8	1.51	0.0390

11. ANTENNA REQUIREMENT

10.1 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 (b), 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.

10.2 ANTENNA CONNECTED CONSTRUCTION

The antenna used for TL-WN350GD is antenna with SMA-B connector (see EUT photo) and for TL-WN350G is fixed nondetachable antenna and for both two models that no antenna other than that furnished by the responsible party shall be used with the device, The maximum peak gain of the antenna is only 1.8dBi.

12.DEVIATION TO TEST SPECIFICATIONS

[NONE]