Ecom Sertech Corp.
Rm. 258, Bldg. 17, NO.195, Sec. 4 Chung Hsing Rd., ChuTung Chen, Hsinchu, Taiwan 310, R.O.C
TEL:886-3-5918012 FAX : 886-3-5825720

TEST REPORT

Product Name ：802.11g SMB Wireless Access Point
Model Number ：XG-3020

Applicant ：Z-Com, Inc.
Address ：7F-2, No.9, Prosperity Rd. I, Science-Based Industrial, Park
Hsinchu, Taiwan, R.O.C.

Received Date：Apr. 09, 2004
Tested Date ：Apr. 09~30, 2004

Notes：
1. This report will be invalid if duplicated or photocopied in part.
2. This report refers only to the specimen(s) submitted to testing, and be invalid as seperately used.
3. This report is invalid without examination stamp and signature of this institute.
4. The tested specimen(s) will be preserved for thirty days from the data issued.
5. The report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

CNLA 0240 ILAC MRA
NVLAP LAB CODE 200110-0

Test Report Certification

Product Name : 802.11g SMB Wireless Access Point

Model Number : XG-3020

Applicant : Z-Com, Inc.

Measurement Standard :

FCC 47 C.F.R. Part 15, Subpart B and Subpart C (Section 15.247),
ANSI C63.4-2001

Tested By : Nicky Liu (Nicky Liu) **Date :** Apr. 30, 2004

Reviewed By : S.B.Lu (S. B. Lu) **Date :** Apr. 30, 2004

Approved By : C.F.Wu (C.F.Wu ,Manager) **Date :** Apr. 30, 2004

WE HEREBY CERTIFY THAT: The measurements shown in the attachment were made in accordance with the procedures indicated, and the energy emitted by the equipment was found to be within the limits applicable. We assume full responsibility for the accuracy and completeness of these measurements and vouch for the qualifications of all persons taking them.

TABLE OF CONTENTS

TITLE PAGE NO.

TABLE OF CONTENTS

1. GENERAL INFORMATION

1.1 General Statement

MEASUREMENT DEVIATION：Comply with standard in full

TRACEABILITY ：This test result is traceable to National or International std.

1.2 General Description of EUT & Power

MANUFACTURER ：Z-Com, Inc.
SAMPLE NAME ：802.11g SMB Wireless Access Point
MODEL NAME ：XG-3020
FREQUENCY RANGE ：2412 MHz to 2462MHz
CHANNEL NUMBER ：11
AIR DATA RATE ：54Mbps (802.11g Mode), 11Mbps(802.11b Mode)
TYPE OF MODULATION ：Orthogonal Frequency Division Multiplex or Direct Sequence Spread Spectrum
FEQUENCY SELECTION ：BY SOFTWARE
EUT Description ：2.4GHz (Orthogonal Frequency Division Multiplex or Direct Sequence Spread Spectrum) Data Transceiver for 802.11g SMB Wireless Access Point
SIGNAL CABLE ：Unshielded RS232 cable, 1m
ANTENNA TYPE ：

Primary port :

Antenna	Manufacturer	Antenna Type.	Antenna Model	Antenna gain
1	Wanshi	1/2λ Dipole Antenna	SNW0007A	5 dBi
2	NETGEAR	Ceiling Antenna	ANT24O5	5 dBi
3	NETGEAR	Omnidirectional Antenna	ANT24P12	12 dBi
4	NETGEAR	Patch Antenna	ANT24D18	18 dBi

ANTENNA CABLE：ACC-10314-01 : 1.5m (Attenuation:1.1dB)

Secondary port : Wanshi / 1/2λ Dipole Antenna / SNW0007A / 5 dBi

POWER SOURCE ：12VDC (From Power Adapter)

Power Adapter	Manufacturer	Model No.	Power Input	Power Output
1	NETGEAR	DV-151A-1	120VAC, 60Hz, 22W	12VDC, 1.2A
2	NETGEAR	DV-121A2J	100VAC, 50/60Hz, 27VA	12VDC, 1.2A

1.3 Proposed Modification Details

General

This section details the modifications to the Z-Com model XG-3020 being proposed. All performance and construction deviations from the characteristics originally reported to the FCC are addressed

Antennas

Z-Com wish to add the following antennas to the system：

Netgear Antenna	Netgear Cable Type	Antenna Gain	Netgear Antenna Type
ANT24P2	Direct to rf connector	2dBi	Omnidirectional Antenna
ANT24P3	Direct to rf connector	3 dBi	Omnidirectional Ante nna
ANT24P4	Direct to rf connector	4 dBi	Omnidirectional Antenna
ANT24S4	ACC-10314-01,02,03,04 or05	4 dBi	Omnidirectional Triband Stand Antenna
ANT24P5	Direct to rf connector	5 dBi	Omnidirectional Antenna
ANT24S5	ACC-10314-01,02,03,04 or05	5 dBi	Omnidirectional Stand Antenna
ANT24P7	Direct to rf connector	7 dBi	Omnidirectional Antenna
ANT24P93	ACC-10314-01,02,03,04 or05	9 dBi	Omnidirectional triband Antenna
ANT2409	ACC-10314-01,02,03,04 or05	9 dBi	Omnidirectional
ANT24P12	ACC-10314-01,02,03,04 or05	12 dBi	Omnidirectional Antenna
ANT24P123	ACC-10314-01,02,03,04 or05	12 dBi	Omnidirectional triband Antenna
ANT24O5	ACC-10314-01,02,03,04 or05	5 dBi	Ceiling Antenna
ANT24D12	ACC-10314-01,02,03,04 or05	12 dBi	Patch Antenna
ANT24D18	ACC-10314-01,02,03,04 or05	18dBi	Patch Antenna

ANTENNA CABLE：

Antenna Cable Type	Length	Attenuation at 2.4~2.5 GHz
ACC-10314-01	1.5 m	1.1 dBi
ACC-10314-02	3 m	2.0 dBi
ACC-10314-03	5 m	3.2 dBi
ACC-10314-04	10 m	6.1 dBi
ACC-10314-05	30 m	18 dBi

All antenna use either a reverse gender SMA or a reverse gender N connector. Antennas provided with a male connector can connect directly to the radio. Those with a female connector have to be connected via a cable as noted in the table above The shortest cable available is a 1.5m cable which has a loss of 1.1dB.

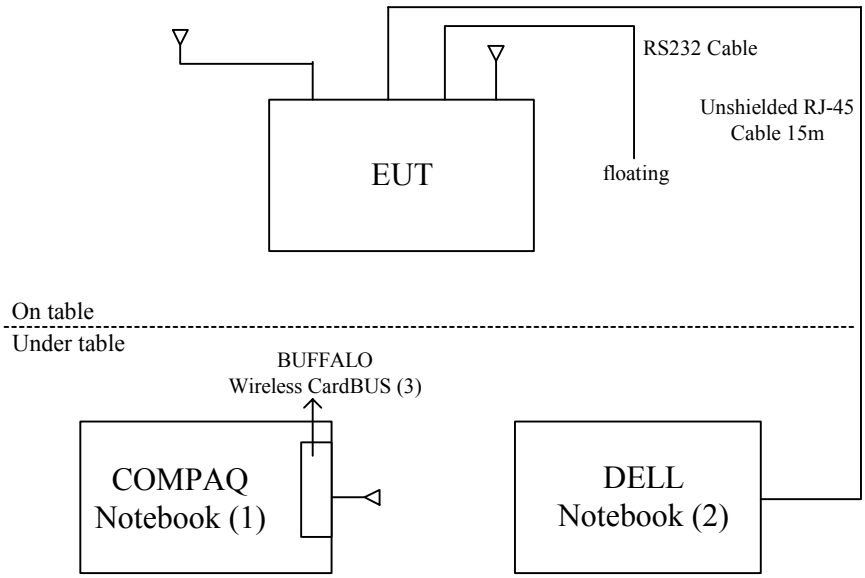
Radiated emissions was performed on the highest gain antenna of each type (Omni-directional, Ceiling and Patch) at the maximum output power from the device. The shortest commercially-available cable (1.5m) was use with the antennas tested to ensure the signal levels to the antennas was at the maximum possible level.

All of the proposed configurations have an MPE distance of less than 20cm. The original application included the user's manual with appropriate wording for the minimum separation distance to be 20cm.

1.4 Description of Peripherals

No.	Product	Manufacturer	Model No.	Serial No.	FCC ID
1	Notebook PC	COMPAQ	N 800V	5Y33KSQZMOXV 1YR	DOC
2	Notebook PC	DELL	PP01L	CN-09C748-48155 -1AP-6630	DOC
3	Wireless CardBUS	BUFFALO	WLI-CB-G54A	14084330810693	FDI-09101744-0

1.5 EUT & Peripherals Setup Diagram



1.6 EUT Operating Condition

1. Setup all computers like the setup diagram.
2. Notebook(1) ping 192.168.0.228 -t -1 500 to EUT.
3. Notebook(2) ping 192.168.0.228 -t -1 500 to EUT
4. Notebook(1) ping 192.168.0.120 -t -1 500 to Notebook (2)
5. Notebook(2) ping 192.168.0.121 -t -1 500 to Notebook (1)
6. All of the function are under run.
7. Start test.

1.7 Description of Test Site

SITE DESCRIPTION：

FCC certificate NO.	: 90585
BSMI certificate NO.	: SL2-IN-E-0002
NVLAP Lab code	: 200118-0
CNLA certificate NO.	: CNLA-ZL97018
VCCI certificate NO.	: R-1229, C-1250
TÜV certificate NO.	: 10008375

NAME OF SITE ： Ecom Sertech Corp. Hsin-Chu Lab.
(Spin-off from ITRI / ERSO on Apr. 01, 2003)

SITE LOCATION ： Rm.258, Bldg.17, NO.195 , Sec. 4, Chung Hsing Rd.,
Chu-Tung Chen. Hsin-Chu, Taiwan 310 R.O.C.

1.8 Summary of Test Results

The EUT has been tested according to the following specifications :

APPLIED STANDARD：FCC 47 C.F.R. Part 15, Subpart B and Subpart C			
Standard Section	**Test Type and Limit**	**Result**	**REMARK**
15.107 15.207	AC Power Conducted Emission Limit : 15.107	PASS	Meet the requirement of limit
15.247(a)(2)	Spectrum Bandwidth of a Orthogonal Frequency Division Multiplex System Limit : 6dB bandwidth > 500KHz	PASS	Meet the requirement of limit
15.247(b)	Maximum Peak Output Power Limit : max. 30dBm	PASS	Meet the requirement of limit
15.109 15.205 15.209	Transmitter Radiated Emissions Limit : Table 15.209	PASS	Meet the requirement of limit
15.247(d)	Power Spectral Density Limit : max. 8dBm	PASS	Meet the requirement of limit
15.247(c)	Out of Band Emission and Restricted Band Radiation Limit:20dB less than peak value of fundamental frequency Restricted band Limit:Table 15.209	PASS	Meet the requirement of limit

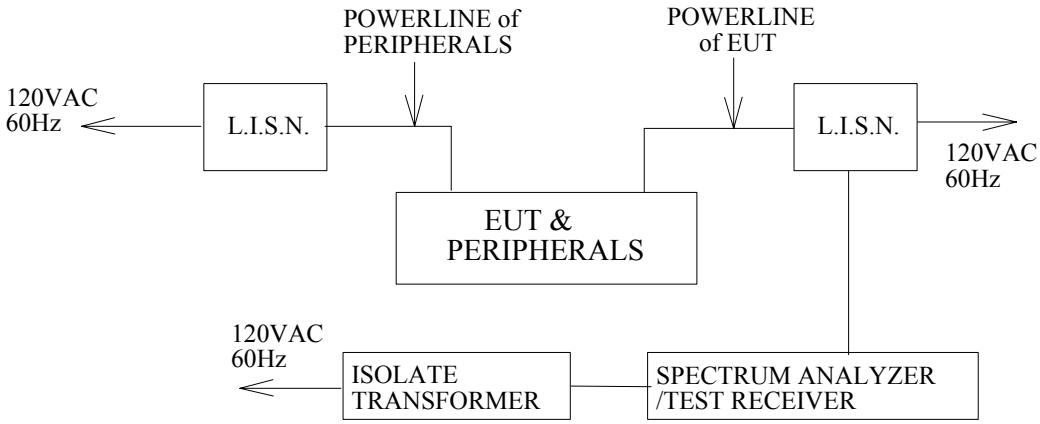
2. CONDUCTED POWERLINE TEST

2.1 Test Equipments

The following test equipments are used during the conducted powerline tests：

Manufacturer or Type	Model No.	Serial No.	Date of Calibration	Calibration Period	Remark
HP SPECTRUM ANALYZER & DISPLAY	8568A	2235A02320	APR. 01, 2003	1 Year	PRETEST
HP QUASI-PEAK ADAPTER	85650 A	2341A00672	APR. 01, 2003	1 Year	PRETEST
SOLAR ISOLATION TRANSFORMER	7032-1	N/A	N/A	N/A	FINAL
EMCO L.I.S.N.	3850/2	9311-1025 9401-1028	JAN. 08, 2004 For Characteristic impedance MAY. 18, 2003 For Insertion loss	1 Year	FINAL
R & S TEST RECEIVER	ESHS30	838550/003	FEB. 11, 2004	1 Year	FINAL
KEENE SHIELDED ROOM	5983	No.1	JUL. 10~12, 2003	N/A	FINAL
R & S PULSE LIMIT	EHS3Z2	357.8810.52	JUL. 10, 2003	1 Year	FINAL
N TYPE COAXIAL CABLE	---------	----------	JUL. 10, 2003	1 Year	FINAL
50Ω TERMINATOR	---------	----------	JUL. 10, 2003	1 Year	FINAL

2.2 Test Setup



2.3 Conducted Power Line Emission Limit

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

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

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

2.4 Test Procedure

The test procedure is performed in a 12ft×12ft×8ft(L×W×H) shielded room.
the EUT along with its peripherals were placed on a 1.0m(W)× 1.5m(L) and 0.8m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane. The EUT was connected to power mains through a line impedance stabilization network (LISN) which provides 50 ohm coupling impedance for measuring instrument and the chasis ground was bounded to the horizontal ground plane of shielded room. All peripherals were connected to the second LISN and the chasis ground also bounded to the horizontal ground plane of shielded room. The excess power cable between the EUT and the LISN was bundled. The power cables of peripherals were unbundled. All connecting cables of EUT and peripherals were moved to find the maximum emission.

2.5 Uncertainty of Conducted Emission

The uncertainty of conducted emission is ±1.36dB.

2.6 Conducted RF Voltage Measurement

The frequency spectrum from 0.15 MHz to 30 MHz was investigated. All emissions not reported are much lower than the prescribed limits.

Temperature：26 ℃ Humidity：65 % RH

Frequency (MHz)	Loss(dB)		Measurement L1(dBμV)		Measurement L2(dBμV)		L1 Emission (dBμV)		L2 Emission (dBμV)		Limits (dBμV)	
	L1	L2	Q.P.	A.V.	Q.P.	A.V.	Q.P.	A.V.	Q.P.	A.V.	Q.P.	A.V.
0.150	0.10	0.20	*	*	*	*	*	*	*	*	66.00	56.00
0.201	0.10	0.20	*	*	25.80	*	*	*	26.00	*	63.57	53.57
0.225	0.10	0.20	33.50	*	*	*	33.60	*	*	*	62.63	52.63
0.291	0.10	0.20	*	*	22.00	*	*	*	22.20	*	60.50	50.50
0.558	0.10	0.20	22.10	*	*	*	22.20	*	*	*	56.00	46.00
0.588	0.10	0.20	*	*	21.20	*	*	*	21.40	*	56.00	46.00
0.639	0.10	0.20	29.30	*	*	*	29.40	*	*	*	56.00	46.00
1.758	0.10	0.20	*	*	22.90	*	*	*	23.10	*	56.00	46.00
1.899	0.10	0.20	20.70	*	*	*	20.80	*	*	*	56.00	46.00
4.098	0.20	0.20	35.90	*	*	*	36.10	*	*	*	56.00	46.00
4.101	0.20	0.20	*	*	36.10	*	*	*	36.30	*	56.00	46.00
4.245	0.20	0.20	36.80	*	*	*	37.00	*	*	*	56.00	46.00
4.539	0.20	0.20	*	*	36.60	*	*	*	36.80	*	56.00	46.00
11.415	0.50	0.50	26.30	*	*	*	26.80	*	*	*	60.00	50.00
13.623	0.50	0.56	*	*	24.70	*	*	*	25.26	*	60.00	50.00
17.136	0.73	0.74	*	*	27.40	*	*	*	28.14	*	60.00	50.00
17.277	0.8	0.8	28.4	*	*	*	29.16	*	*	*	60.00	50.00
30.000	1.4	1.8	*	*	*	*	*	*	*	*	60.00	50.00

REMARKS：1. ＊ Undetectable or the Q.P. value is lower than the limits of Ave.
2. The EUT can be operated in transmitting, stand-by and receiving mode. After preliminary scan, EUT in transmitting mode has highest emission. The EUT was set in transmitting mode at finial test to get the worst case test results.
3. Both antenna 1, 2, 3,4 have been verified. The test results of antenna1, 2, 3, 4 are the same.
4. Mode : 802.11b mode.
5. Power Adapter : NETGEAR / DV-151A-1

The frequency spectrum from 0.15 MHz to 30 MHz was investigated. All emissions not reported are much lower than the prescribed limits.

Temperature：26 ℃ Humidity：65 % RH

Frequency (MHz)	Loss(dB)		Measurement L1(dBμV)		Measurement L2(dBμV)		L1 Emission (dBμV)		L2 Emission (dBμV)		Limits (dBμV)	
	L1	L2	Q.P.	A.V.	Q.P.	A.V.	Q.P.	A.V.	Q.P.	A.V.	Q.P.	A.V.
0.150	0.10	0.20	*	*	*	*	*	*	*	*	66.00	56.00
0.165	0.10	0.20	33.50	*	*	*	33.60	*	*	*	65.21	55.21
0.225	0.10	0.20	*	*	35.10	*	*	*	35.30	*	62.63	52.63
0.294	0.10	0.20	23.60	*	*	*	23.70	*	*	*	60.41	50.41
0.561	0.10	0.20	*	*	25.60	*	*	*	25.80	*	56.00	46.00
0.609	0.10	0.20	26.80	*	32.00	*	26.90	*	32.20	*	56.00	46.00
1.458	0.10	0.20	*	*	20.90	*	*	*	21.10	*	56.00	46.00
1.752	0.10	0.20	21.80	*	*	*	21.90	*	*	*	56.00	46.00
4.089	0.20	0.20	*	*	36.40	*	*	*	36.60	*	56.00	46.00
4.098	0.20	0.20	35.20	*	*	*	35.40	*	*	*	56.00	46.00
4.239	0.20	0.20	36.80	*	*	*	37.00	*	*	*	56.00	46.00
4.380	0.20	0.20	*	*	38.30	*	*	*	38.50	*	56.00	46.00
11.244	0.50	0.50	*	*	26.90	*	*	*	27.40	*	60.00	50.00
11.850	0.50	0.50	28.20	*	*	*	28.70	*	*	*	60.00	50.00
16.950	0.70	0.70	*	*	27.40	*	*	*	28.10	*	60.00	50.00
17.109	0.72	0.73	28.80	*	*	*	29.52	*	*	*	60.00	50.00
30.000	1.4	1.8	*	*	*	*	*	*	*	*	60.00	50.00

REMARKS：1. ＊ Undetectable or the Q.P. value is lower than the limits of Ave.
2. The EUT can be operated in transmitting, stand-by and receiving mode. After preliminary scan, EUT in transmitting mode has highest emission. The EUT was set in transmitting mode at finial test to get the worst case test results.
3. Both antenna1, 2, 3,4 have been verified. The test results of antenna 1, 2, 3, 4 are the same.
4. Mode : 802.11g mode.
5. Power Adapter : NETGEAR / DV-151A-1

The frequency spectrum from 0.15 MHz to 30 MHz was investigated. All emissions not reported are much lower than the prescribed limits.

Temperature：26 ℃ Humidity：65 % RH

Frequency (MHz)	Loss(dB)		Measurement L1(dBμV)		Measurement L2(dBμV)		L1 Emission (dBμV)		L2 Emission (dBμV)		Limits (dBμV)	
	L1	L2	Q.P.	A.V.	Q.P.	A.V.	Q.P.	A.V.	Q.P.	A.V.	Q.P.	A.V.
0.150	0.10	0.20	*	*	*	*	*	*	*	*	66.00	56.00
0.210	0.10	0.20	*	*	31.60	*	*	*	31.80	*	63.21	53.21
0.240	0.10	0.20	30.10	*	*	*	30.20	*	*	*	62.10	52.10
0.291	0.10	0.20	24.80	*	*	*	24.90	*	*	*	60.50	50.50
0.294	0.10	0.20	*	*	21.90	*	*	*	22.10	*	60.41	50.41
0.654	0.10	0.20	*	*	25.20	*	*	*	25.40	*	56.00	46.00
0.657	0.10	0.20	25.80	*	*	*	25.90	*	*	*	56.00	46.00
1.314	0.10	0.20	*	*	26.20	*	*	*	26.40	*	56.00	46.00
2.088	0.11	0.20	27.40	*	*	*	27.51	*	*	*	56.00	46.00
2.328	0.13	0.20	30.30	*	*	*	30.43	*	*	*	56.00	46.00
2.331	0.13	0.20	*	*	27.80	*	*	*	28.00	*	56.00	46.00
4.956	0.20	0.20	34.40	*	29.90	*	34.60	*	30.10	*	56.00	46.00
8.304	0.40	0.33	*	*	30.30	*	*	*	30.63	*	60.00	50.00
8.598	0.40	0.36	33.10	*	*	*	33.50	*	*	*	60.00	50.00
18.219	0.90	0.98	30.10	*	*	*	31.00	*	*	*	60.00	50.00
18.213	0.90	0.98	*	*	24.60	*	*	*	25.58	*	60.00	50.00
30.000	1.40	1.80	*	*	*	*	*	*	*	*	60.00	50.00

REMARKS：1. ＊ Undetectable or the Q.P. value is lower than the limits of Ave.
2. The EUT can be operated in transmitting, stand-by and receiving mode. After preliminary scan, EUT in transmitting mode has highest emission. The EUT was set in transmitting mode at finial test to get the worst case test results.
3. Both antenna 1, 2, 3, 4 have been verified. The test results of antenna 1, 2, 3, 4 are the same.
4. Mode : 802.11b mode.
5. Power Adapter : NETGEAR / DV-121A2J

The frequency spectrum from 0.15 MHz to 30 MHz was investigated. All emissions not reported are much lower than the prescribed limits.

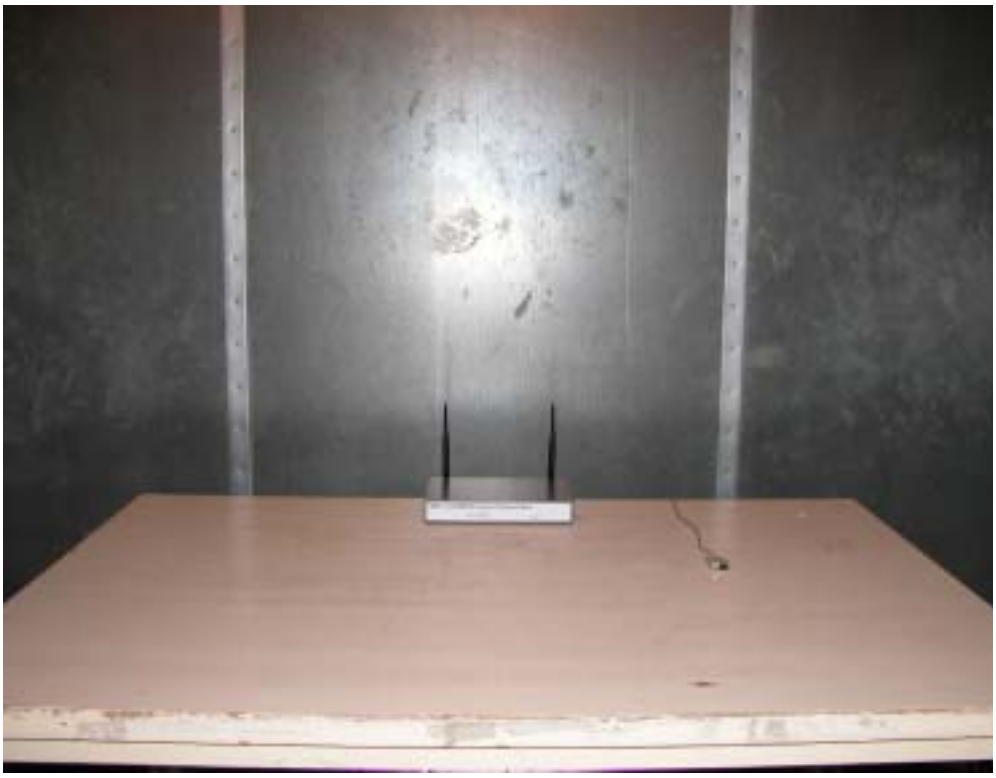
Temperature：26 ℃ Humidity：65 % RH

Frequency (MHz)	Loss(dB)		Measurement L1(dBμV)		Measurement L2(dBμV)		L1 Emission (dBμV)		L2 Emission (dBμV)		Limits (dBμV)	
	L1	L2	Q.P.	A.V.	Q.P.	A.V.	Q.P.	A.V.	Q.P.	A.V.	Q.P.	A.V.
0.150	0.10	0.20	*	*	*	*	*	*	*	*	66.00	56.00
0.177	0.10	0.20	25.60	*	*	*	25.70	*	*	*	64.63	54.63
0.231	0.10	0.20	*	*	29.00	*	*	*	29.20	*	62.41	52.41
0.291	0.10	0.20	*	*	23.20	*	*	*	23.40	*	60.50	50.50
0.477	0.10	0.20	16.70	*	*	*	16.80	*	*	*	56.39	46.39
0.657	0.10	0.20	*	*	24.30	*	*	*	24.50	*	56.00	46.00
1.017	0.10	0.20	23.20	*	*	*	23.30	*	*	*	56.00	46.00
1.311	0.10	0.20	*	*	26.60	*	*	*	26.80	*	56.00	46.00
2.091	0.11	0.20	27.50	*	*	*	27.61	*	*	*	56.00	46.00
2.328	0.13	0.20	28.30	*	27.70	*	28.43	*	27.90	*	56.00	46.00
4.953	0.20	0.20	27.40	*	*	*	27.60	*	*	*	56.00	46.00
4.956	0.20	0.20	*	*	30.20	*	*	*	30.40	*	56.00	46.00
8.304	0.40	0.33	31.30	*	*	*	31.70	*	*	*	60.00	50.00
8.895	0.40	0.39	*	*	29.60	*	*	*	29.99	*	60.00	50.00
18.072	0.90	0.99	26.90	*	*	*	27.80	*	*	*	60.00	50.00
18.084	0.90	0.99	*	*	21.90	*	*	*	22.89	*	60.00	50.00
30.000	1.4	1.8	*	*	*	*	*	*	*	*	60.00	50.00

REMARKS：1. ＊ Undetectable or the Q.P. value is lower than the limits of Ave.
2. The EUT can be operated in transmitting, stand-by and receiving mode. After preliminary scan, EUT in transmitting mode has highest emission. The EUT was set in transmitting mode at finial test to get the worst case test results.
3. Both antenna 1, 2, 3, 4 have been verified. The test results of antenna 1, 2, 3, 4 are the same.
4. Mode : 802.11g mode.
5. Power Adapter : NETGEAR / DV-121A2J

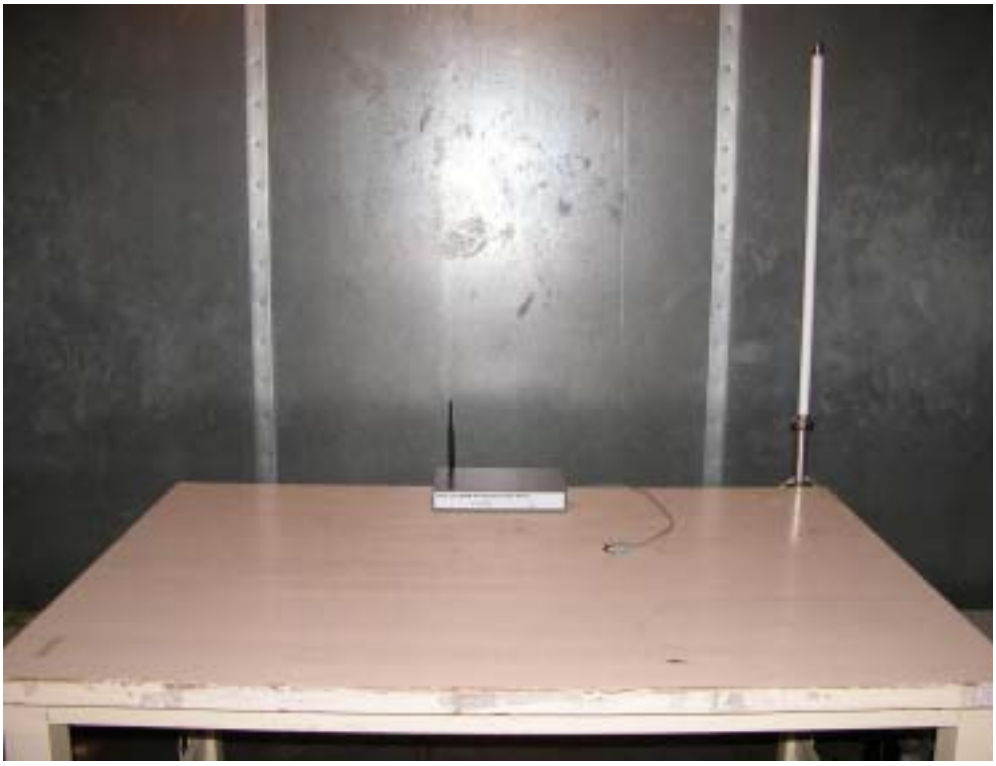
2.7 Photos of Conduction Test

Antenna 1



Antenna 2

Antenna 3



Antenna 4

3. RADIATED EMISSION TEST

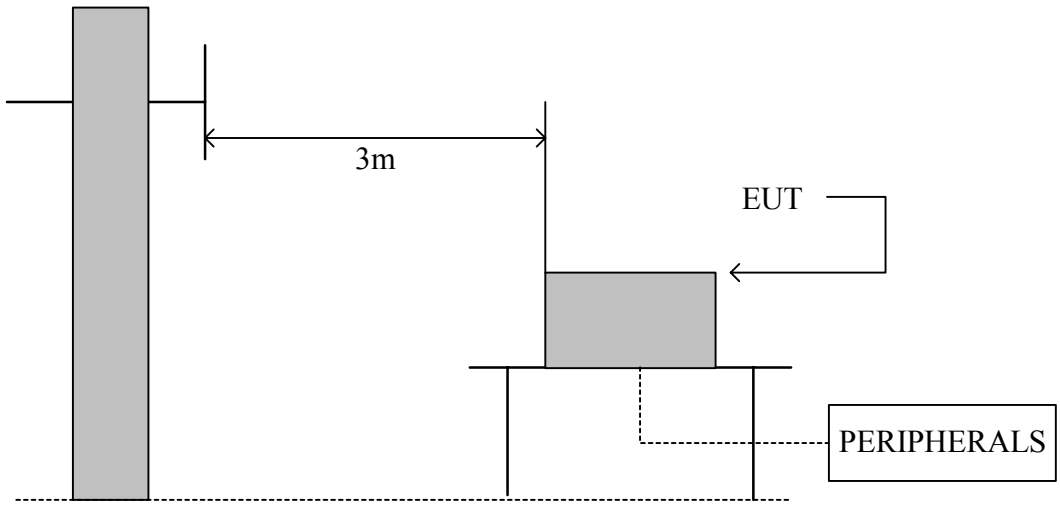
3.1 Test Equipments

The following test equipments are utilized in making the measurements contained in this report.

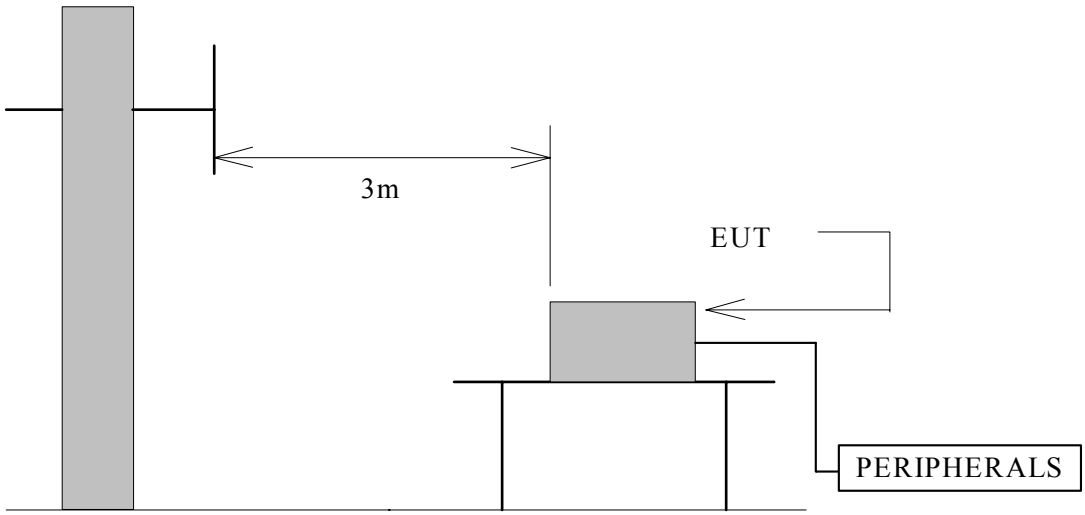
Manufacturer or Type	Model No	Serial No	Date of Calibration	Calibration Period	Remark
CHASE BI-LOG ANTENNA	CBL6112B	2562	MAY 07, 2003	1 Year	FINAL
OPEN SITE	----------	No.2	MAY. 06, 2003	1 Year	FINAL
N TYPE COAXIAL CABLE	CHA9525	015	JUL. 13, 2003	1 Year	FINAL
Horn Antenna	AH-118	10090	FEB. 25, 2004	1 Year	FINAL
HP Pre-amplifier	8449B	3008A01916	SEPT. 12, 2003	1 Year	FINAL
HP High pass filter	84300/80038	002	cal. on use	1 Year	FINAL
Horn Antenna	AH-840	03077	FEB. 25, 2004	1 Year	FINAL

3.2 Test Setup

The diagram below shows the test setup that is utilized to make the measurements for emission from 30 to 1GHz.



The diagram below shows the test setup that is utilized to make the measurements for emission above 1GHz.



Antenna Elevation Variable

3.3 Radiation Limit

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

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

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

3.4 Test Procedures

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarization of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE：

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 KHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.

2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection and frequency above 1GHz.

3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.

3.5 Uncertainty of Radiated Emission

The uncertainty of radiated emission is ± 2.72dB.

3.6 Radiated RF Noise Measurement

Test Requirement: 15.109, 15.209
The frequency spectrum from 30 MHz to 1000 MHz was investigated. All emissions not reported are much lower than the prescribed limits.
All readings are quasi-peak values.

Temperature：24 ℃ Humidity：71 % RH

Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading at 3m(dBμV)		Limits at 3m (dBμV/m)	Emission Level at 3m(dBμV/m)	
			Horizontal	Vertical		Horizontal	Vertical
30.000	18.96	0.90	*	*	40.00	*	*
132.000	12.42	2.25	7.10	9.30	43.50	21.77	23.97
210.780	11.36	2.71	8.10	8.20	43.50	22.17	22.27
263.990	13.43	3.16	7.80	8.70	46.00	24.38	25.28
395.990	17.27	3.88	8.30	9.50	46.00	29.45	30.65
527.990	18.82	4.36	10.20	10.10	46.00	33.37	33.27
659.990	19.46	5.04	11.10	10.80	46.00	35.60	35.30
791.980	20.07	5.49	9.00	9.70	46.00	34.56	35.26
923.980	20.87	5.79	7.90	7.30	46.00	34.56	33.96
1000.000	21.79	6.40	*	*	54.00	*	*

REMARKS：1. ＊Undetectable

2. Emission level (dBμV/m) =Antenna Factor (dB/m) + Cable loss (dB) + Meter Reading (dBμV).
3. According to technical experiences, all spurious emission at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in finial test.
4. The EUT can be operated in TX, RX and Stand-by mode. After a preliminary Scan. We found EUT in TX mode generated highest emission. The EUT was Set to TX mode in finial test.
5. Mode : Wireless 802.11b Transmitting test (Antenna 1).

Test Requirement: 15.109, 15.209
The frequency spectrum from 30 MHz to 1000 MHz was investigated. All emissions not reported are much lower than the prescribed limits.
All readings are quasi-peak values.

Temperature：24 ℃ Humidity：71 % RH

Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading at 3m(dBμV)		Limits at 3m (dBμV/m)	Emission Level at 3m(dBμV/m)	
			Horizontal	Vertical		Horizontal	Vertical
30.000	18.96	0.90	*	*	40.00	*	*
132.000	12.42	2.25	7.60	9.50	43.50	22.27	24.17
210.780	11.36	2.71	8.40	8.50	43.50	22.47	22.57
263.990	13.43	3.16	7.30	8.00	46.00	23.88	24.58
395.990	17.27	3.88	9.10	10.40	46.00	30.25	31.55
527.990	18.82	4.36	10.20	10.70	46.00	33.37	33.87
659.990	19.46	5.04	11.20	11.20	46.00	35.70	35.70
791.980	20.07	5.49	9.60	9.70	46.00	35.16	35.26
923.980	20.87	5.79	7.30	7.40	46.00	33.96	34.06
1000.000	21.79	6.40	*	*	54.00	*	*

REMARKS：1. ＊Undetectable

2. Emission level (dBμV/m) =Antenna Factor (dB/m) + Cable loss (dB) + Meter Reading (dBμV).
3. According to technical experiences, all spurious emission at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in finial test.
4. The EUT can be operated in TX, RX and Stand-by mode. After a preliminary Scan. We found EUT in TX mode generated highest emission. The EUT was Set to TX mode in finial test.
5. Mode : Wireless 802.11g Transmitting test (Antenna 1).

Test Requirement: 15.109, 15.209
The frequency spectrum from 30 MHz to 1000 MHz was investigated. All emissions not reported are much lower than the prescribed limits.
All readings are quasi-peak values.

Temperature：23.3 ℃ Humidity：58 % RH

Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading at 3m(dBμV)		Limits at 3m (dBμV/m)	Emission Level at 3m(dBμV/m)	
			Horizontal	Vertical		Horizontal	Vertical
30.000	18.96	0.90	*	*	40.00	*	*
132.000	12.42	2.25	7.40	9.40	43.50	22.07	24.07
210.780	11.36	2.71	8.20	8.70	43.50	22.27	22.77
263.990	13.43	3.16	7.50	8.30	46.00	24.08	24.88
395.990	17.27	3.88	8.90	9.80	46.00	30.05	30.95
527.990	18.82	4.36	10.40	10.40	46.00	33.57	33.57
659.990	19.46	5.04	11.40	11.00	46.00	35.90	35.50
791.980	20.07	5.49	9.20	9.50	46.00	34.76	35.06
923.980	20.87	5.79	8.10	7.20	46.00	34.76	33.86
1000.000	21.79	6.40	*	*	54.00	*	*

REMARKS：1. ＊Undetectable

2. Emission level (dBμV/m) =Antenna Factor (dB/m) + Cable loss (dB) + Meter Reading (dBμV).
3. According to technical experiences, all spurious emission at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in finial test.
4. The EUT can be operated in TX, RX and Stand-by mode. After a preliminary Scan. We found EUT in TX mode generated highest emission. The EUT was Set to TX mode in finial test.
5. Mode : Wireless 802.11b Transmitting test (Antenna 2).

Test Requirement: 15.109, 15.209
The frequency spectrum from 30 MHz to 1000 MHz was investigated. All emissions not reported are much lower than the prescribed limits.
All readings are quasi-peak values.

Temperature：24 ℃ Humidity：71 % RH

Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading at 3m(dBμV)		Limits at 3m (dBμV/m)	Emission Level at 3m(dBμV/m)	
			Horizontal	Vertical		Horizontal	Vertical
30.000	18.96	0.90	*	*	40.00	*	*
132.000	12.42	2.25	7.40	9.60	43.50	22.07	24.27
210.780	11.36	2.71	8.30	8.30	43.50	22.37	22.37
263.990	13.43	3.16	7.20	8.40	46.00	23.78	24.98
395.990	17.27	3.88	9.30	10.30	46.00	30.45	31.45
527.990	18.82	4.36	10.60	11.10	46.00	33.77	34.27
659.990	19.46	5.04	11.30	11.10	46.00	35.80	35.60
791.980	20.07	5.49	9.70	9.70	46.00	35.26	35.26
923.980	20.87	5.79	7.30	7.50	46.00	33.96	34.16
1000.000	21.79	6.40	*	*	54.00	*	*

REMARKS：1. ＊Undetectable

2. Emission level (dBμV/m) =Antenna Factor (dB/m) + Cable loss (dB) + Meter Reading (dBμV).
3. According to technical experiences, all spurious emission at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in finial test.
4. The EUT can be operated in TX, RX and Stand-by mode. After a preliminary Scan. We found EUT in TX mode generated highest emission. The EUT was Set to TX mode in finial test.
5. Mode : Wireless 802.11g Transmitting test (Antenna 2).

Test Requirement: 15.109, 15.209
The frequency spectrum from 30 MHz to 1000 MHz was investigated. All emissions not reported are much lower than the prescribed limits.
All readings are quasi-peak values.

Temperature：24 ℃ Humidity：71 % RH

Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading at 3m(dBμV)		Limits at 3m (dBμV/m)	Emission Level at 3m(dBμV/m)	
			Horizontal	Vertical		Horizontal	Vertical
30.000	18.96	0.90	*	*	40.00	*	*
132.000	12.42	2.25	7.70	9.70	43.50	22.37	24.37
210.780	11.36	2.71	8.30	8.30	43.50	22.37	22.37
263.990	13.43	3.16	7.60	7.90	46.00	24.18	24.48
395.990	17.27	3.88	9.10	10.20	46.00	30.25	31.35
527.990	18.82	4.36	10.10	10.60	46.00	33.27	33.77
659.990	19.46	5.04	11.20	11.20	46.00	35.70	35.70
791.980	20.07	5.49	9.60	9.60	46.00	35.16	35.16
923.980	20.87	5.79	7.30	7.60	46.00	33.96	34.26
1000.000	21.79	6.40	*	*	54.00	*	*

REMARKS：1. ＊Undetectable

2. Emission level (dBμV/m) =Antenna Factor (dB/m) + Cable loss (dB) + Meter Reading (dBμV).
3. According to technical experiences, all spurious emission at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in finial test.
4. The EUT can be operated in TX, RX and Stand-by mode. After a preliminary Scan. We found EUT in TX mode generated highest emission. The EUT was Set to TX mode in finial test.
5. Mode : Wireless 802.11b Transmitting test (Antenna 3).

Test Requirement: 15.109, 15.209
The frequency spectrum from 30 MHz to 1000 MHz was investigated. All emissions not reported are much lower than the prescribed limits.
All readings are quasi-peak values.

Temperature：24 ℃ Humidity：71 % RH

Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading at 3m(dBμV)		Limits at 3m (dBμV/m)	Emission Level at 3m(dBμV/m)	
			Horizontal	Vertical		Horizontal	Vertical
30.000	18.96	0.90	*	*	40.00	*	*
132.000	12.42	2.25	7.50	9.70	43.50	22.17	24.37
210.780	11.36	2.71	8.10	8.60	43.50	22.17	22.67
263.990	13.43	3.16	7.60	8.50	46.00	24.18	25.08
395.990	17.27	3.88	9.40	10.20	46.00	30.55	31.35
527.990	18.82	4.36	10.70	11.00	46.00	33.87	34.17
659.990	19.46	5.04	11.50	11.10	46.00	36.00	35.60
791.980	20.07	5.49	9.70	9.40	46.00	35.26	34.96
923.980	20.87	5.79	7.40	7.70	46.00	34.06	34.36
1000.000	21.79	6.40	*	*	54.00	*	*

REMARKS：1. ＊Undetectable

2. Emission level (dBμV/m) =Antenna Factor (dB/m) + Cable loss (dB) + Meter Reading (dBμV).
3. According to technical experiences, all spurious emission at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in finial test.
4. The EUT can be operated in TX, RX and Stand-by mode. After a preliminary Scan. We found EUT in TX mode generated highest emission. The EUT was Set to TX mode in finial test.
5. Mode : Wireless 802.11g Transmitting test (Antenna 3).

Test Requirement: 15.109, 15.209
The frequency spectrum from 30 MHz to 1000 MHz was investigated. All emissions not reported are much lower than the prescribed limits.
All readings are quasi-peak values.

Temperature：24 ℃ Humidity：71 % RH

Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading at 3m(dBμV)		Limits at 3m (dBμV/m)	Emission Level at 3m(dBμV/m)	
			Horizontal	Vertical		Horizontal	Vertical
30.000	18.96	0.90	*	*	40.00	*	*
132.000	12.42	2.25	7.80	9.70	43.50	22.47	24.37
210.780	11.36	2.71	8.60	8.30	43.50	22.67	22.37
263.990	13.43	3.16	7.40	7.90	46.00	23.98	24.48
395.990	17.27	3.88	8.90	10.20	46.00	30.05	31.35
527.990	18.82	4.36	9.80	10.60	46.00	32.97	33.77
659.990	19.46	5.04	11.30	11.20	46.00	35.80	35.70
791.980	20.07	5.49	9.40	9.60	46.00	34.96	35.16
923.980	20.87	5.79	7.20	7.30	46.00	33.86	33.96
1000.000	21.79	6.40	*	*	54.00	*	*

REMARKS：1. ＊Undetectable

2. Emission level (dBμV/m) =Antenna Factor (dB/m) + Cable loss (dB) + Meter Reading (dBμV).
3. According to technical experiences, all spurious emission at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in finial test.
4. The EUT can be operated in TX, RX and Stand-by mode. After a preliminary Scan. We found EUT in TX mode generated highest emission. The EUT was Set to TX mode in finial test.
5. Mode : Wireless 802.11b Transmitting test (Antenna 4).

Test Requirement: 15.109, 15.209
The frequency spectrum from 30 MHz to 1000 MHz was investigated. All emissions not reported are much lower than the prescribed limits.
All readings are quasi-peak values.

Temperature：24 ℃ Humidity：71 % RH

Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading at 3m(dBμV)		Limits at 3m (dBμV/m)	Emission Level at 3m(dBμV/m)	
			Horizontal	Vertical		Horizontal	Vertical
30.000	18.96	0.90	*	*	40.00	*	*
132.000	12.42	2.25	7.30	9.20	43.50	21.97	23.87
210.780	11.36	2.71	8.10	8.30	43.50	22.17	22.37
263.990	13.43	3.16	7.20	8.10	46.00	23.78	24.68
395.990	17.27	3.88	9.30	10.10	46.00	30.45	31.25
527.990	18.82	4.36	10.50	10.90	46.00	33.67	34.07
659.990	19.46	5.04	11.30	11.40	46.00	35.80	35.90
791.980	20.07	5.49	9.60	9.10	46.00	35.16	34.66
923.980	20.87	5.79	7.30	7.50	46.00	33.96	34.16
1000.000	21.79	6.40	*	*	54.00	*	*

REMARKS：1. ＊Undetectable

2. Emission level (dBμV/m) =Antenna Factor (dB/m) + Cable loss (dB) + Meter Reading (dBμV).
3. According to technical experiences, all spurious emission at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in finial test.
4. The EUT can be operated in TX, RX and Stand-by mode. After a preliminary Scan. We found EUT in TX mode generated highest emission. The EUT was Set to TX mode in finial test.
5. Mode : Wireless 802.11g Transmitting test (Antenna 4).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4823.61	44.11	34.44	2.82	35.16	9.50	0.00	36.70	74	-37.30	P	1.0
4823.61	31.19	34.44	2.82	35.16	9.50	0.00	23.78	54	-30.22	A	1.0
7236.05	42.85	39.81	4.79	35.65	9.50	0.00	42.30	74	-31.70	P	1.0
7236.05	31.25	39.81	4.79	35.65	9.50	0.00	30.70	54	-23.30	A	1.0
9647.88	43.88	38.54	5.90	36.44	9.50	0.00	42.38	74	-31.62	P	1.0
9647.88	32.14	38.54	5.90	36.44	9.50	0.00	30.64	54	-23.36	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 1).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4824.16	44.80	34.44	2.82	35.16	9.50	0.00	37.40	74	-36.60	P	1.0
4824.16	31.16	34.44	2.82	35.16	9.50	0.00	23.76	54	-30.24	A	1.0
7237.55	43.73	39.80	4.80	35.65	9.50	0.00	43.18	74	-30.82	P	1.0
7237.55	31.34	39.80	4.80	35.65	9.50	0.00	30.79	54	-23.21	A	1.0
9648.83	44.70	38.54	5.90	36.44	9.50	0.00	43.20	74	-30.80	P	1.0
9648.83	31.87	38.54	5.90	36.44	9.50	0.00	30.37	54	-23.63	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 1).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4873.83	43.98	34.77	2.73	35.20	9.50	0.00	36.78	74	-37.22	P	1.0
4873.83	32.68	34.77	2.73	35.20	9.50	0.00	25.48	54	-28.52	A	1.0
7312.22	42.14	39.78	4.82	35.64	9.50	0.00	41.60	74	-32.40	P	1.0
7312.22	32.25	39.78	4.82	35.64	9.50	0.00	31.71	54	-22.29	A	1.0
9747.94	44.21	38.53	5.90	36.60	9.50	0.00	42.54	74	-31.46	P	1.0
9747.94	31.58	38.53	5.90	36.60	9.50	0.00	29.91	54	-24.09	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 1).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4873.16	45.21	34.76	2.73	35.20	9.50	0.00	38.00	74	-36.00	P	1.0
4873.16	31.85	34.76	2.73	35.20	9.50	0.00	24.64	54	-29.36	A	1.0
7311.55	42.14	39.78	4.82	35.64	9.50	0.00	41.60	74	-32.40	P	1.0
7311.55	32.36	39.78	4.82	35.64	9.50	0.00	31.82	54	-22.18	A	1.0
9747.61	45.21	38.53	5.90	36.60	9.50	0.00	43.54	74	-30.46	P	1.0
9747.61	41.86	38.53	5.90	36.60	9.50	0.00	40.19	54	-13.81	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 1).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4923.27	45.87	35.09	2.64	35.24	9.50	0.00	38.86	74	-35.14	P	1.0
4923.27	32.54	35.09	2.64	35.24	9.50	0.00	25.53	54	-28.47	A	1.0
7387.99	42.14	39.74	4.86	35.62	9.50	0.00	41.62	74	-32.38	P	1.0
7387.99	31.41	39.74	4.86	35.62	9.50	0.00	30.89	54	-23.11	A	1.0
9848.16	42.89	38.52	5.90	36.76	9.50	0.00	41.05	74	-32.95	P	1.0
9848.16	32.14	38.52	5.90	36.76	9.50	0.00	30.30	54	-23.70	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 1).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4923.11	43.98	35.09	2.64	35.24	9.50	0.00	36.97	74	-37.03	P	1.0
4923.11	32.52	35.09	2.64	35.24	9.50	0.00	25.51	54	-28.49	A	1.0
7387.05	42.56	39.75	4.85	35.62	9.50	0.00	42.04	74	-31.96	P	1.0
7387.05	31.47	39.75	4.85	35.62	9.50	0.00	30.95	54	-23.05	A	1.0
9847.83	44.85	38.52	5.90	36.76	9.50	0.00	43.01	74	-30.99	P	1.0
9847.83	31.69	38.52	5.90	36.76	9.50	0.00	29.85	54	-24.15	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 1).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
3288.00	44.89	31.53	3.32	35.61	9.50	0.00	34.62	74	-39.38	P	1.0
3288.00	32.65	31.53	3.32	35.61	9.50	0.00	22.38	54	-31.62	A	1.0
7236.05	43.57	39.81	4.79	35.65	9.50	0.00	43.02	74	-30.98	P	1.0
7236.05	32.54	39.81	4.79	35.65	9.50	0.00	31.99	54	-22.01	A	1.0
9647.88	43.89	38.54	5.90	36.44	9.50	0.00	42.39	74	-31.61	P	1.0
9647.88	32.19	38.54	5.90	36.44	9.50	0.00	30.69	54	-23.31	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 1).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4824.16	44.98	34.44	2.82	35.16	9.50	0.00	37.58	74	-36.42	P	1.0
4824.16	32.54	34.44	2.82	35.16	9.50	0.00	25.14	54	-28.86	A	1.0
7237.55	42.86	39.80	4.80	35.65	9.50	0.00	42.31	74	-31.69	P	1.0
7237.55	31.25	39.80	4.80	35.65	9.50	0.00	30.70	54	-23.30	A	1.0
9648.83	43.58	38.54	5.90	36.44	9.50	0.00	42.08	74	-31.92	P	1.0
9648.83	31.54	38.54	5.90	36.44	9.50	0.00	30.04	54	-23.96	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 1).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4873.83	44.89	34.77	2.73	35.20	9.50	0.00	37.69	74	-36.31	P	1.0
4873.83	32.54	34.77	2.73	35.20	9.50	0.00	25.34	54	-28.66	A	1.0
7312.22	42.85	39.78	4.82	35.64	9.50	0.00	42.31	74	-31.69	P	1.0
7312.22	31.25	39.78	4.82	35.64	9.50	0.00	30.71	54	-23.29	A	1.0
9747.94	43.88	38.53	5.90	36.60	9.50	0.00	42.21	74	-31.79	P	1.0
9747.94	32.14	38.53	5.90	36.60	9.50	0.00	30.47	54	-23.53	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 1).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4873.16	44.80	34.76	2.73	35.20	9.50	0.00	37.59	74	-36.41	P	1.0
4873.16	31.16	34.76	2.73	35.20	9.50	0.00	23.95	54	-30.05	A	1.0
7311.55	43.73	39.78	4.82	35.64	9.50	0.00	43.19	74	-30.81	P	1.0
7311.55	31.34	39.78	4.82	35.64	9.50	0.00	30.80	54	-23.20	A	1.0
9747.61	44.70	38.53	5.90	36.60	9.50	0.00	43.03	74	-30.97	P	1.0
9747.61	31.87	38.53	5.90	36.60	9.50	0.00	30.20	54	-23.80	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 1).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4923.27	44.68	35.09	2.64	35.24	9.50	0.00	37.67	74	-36.33	P	1.0
4923.27	32.56	35.09	2.64	35.24	9.50	0.00	25.55	54	-28.45	A	1.0
7387.99	41.58	39.74	4.86	35.62	9.50	0.00	41.06	74	-32.94	P	1.0
7387.99	32.16	39.74	4.86	35.62	9.50	0.00	31.64	54	-22.36	A	1.0
9848.16	42.46	38.52	5.90	36.76	9.50	0.00	40.62	74	-33.38	P	1.0
9848.16	32.62	38.52	5.90	36.76	9.50	0.00	30.78	54	-23.22	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 1).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4923.11	44.61	35.09	2.64	35.24	9.50	0.00	37.60	74	-36.40	P	1.0
4923.11	32.14	35.09	2.64	35.24	9.50	0.00	25.13	54	-28.87	A	1.0
7387.05	43.58	39.75	4.85	35.62	9.50	0.00	43.06	74	-30.94	P	1.0
7387.05	32.74	39.75	4.85	35.62	9.50	0.00	32.22	54	-21.78	A	1.0
9847.83	43.74	38.52	5.90	36.76	9.50	0.00	41.90	74	-32.10	P	1.0
9847.83	32.68	38.52	5.90	36.76	9.50	0.00	30.84	54	-23.16	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 1).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4823.61	44.13	34.44	2.82	35.16	9.50	0.00	36.72	74	-37.28	P	1.0
4823.61	31.56	34.44	2.82	35.16	9.50	0.00	24.15	54	-29.85	A	1.0
7236.05	42.52	39.81	4.79	35.65	9.50	0.00	41.97	74	-32.03	P	1.0
7236.05	31.58	39.81	4.79	35.65	9.50	0.00	31.03	54	-22.97	A	1.0
9647.88	42.98	38.54	5.90	36.44	9.50	0.00	41.48	74	-32.52	P	1.0
9647.88	32.14	38.54	5.90	36.44	9.50	0.00	30.64	54	-23.36	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 2).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4824.16	44.78	34.44	2.82	35.16	9.50	0.00	37.38	74	-36.62	P	1.0
4824.16	32.14	34.44	2.82	35.16	9.50	0.00	24.74	54	-29.26	A	1.0
7237.55	43.71	39.80	4.80	35.65	9.50	0.00	43.16	74	-30.84	P	1.0
7237.55	32.15	39.80	4.80	35.65	9.50	0.00	31.60	54	-22.40	A	1.0
9648.83	43.58	38.54	5.90	36.44	9.50	0.00	42.08	74	-31.92	P	1.0
9648.83	32.87	38.54	5.90	36.44	9.50	0.00	31.37	54	-22.63	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 2).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4873.83	43.47	34.77	2.73	35.20	9.50	0.00	36.27	74	-37.73	P	1.0
4873.83	31.58	34.77	2.73	35.20	9.50	0.00	24.38	54	-29.62	A	1.0
7312.22	42.37	39.78	4.82	35.64	9.50	0.00	41.83	74	-32.17	P	1.0
7312.22	31.87	39.78	4.82	35.64	9.50	0.00	31.33	54	-22.67	A	1.0
9747.94	43.68	38.53	5.90	36.60	9.50	0.00	42.01	74	-31.99	P	1.0
9747.94	32.58	38.53	5.90	36.60	9.50	0.00	30.91	54	-23.09	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 2).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4873.16	45.02	34.76	2.73	35.20	9.50	0.00	37.81	74	-36.19	P	1.0
4873.16	32.68	34.76	2.73	35.20	9.50	0.00	25.47	54	-28.53	A	1.0
7311.55	42.31	39.78	4.82	35.64	9.50	0.00	41.77	74	-32.23	P	1.0
7311.55	32.54	39.78	4.82	35.64	9.50	0.00	32.00	54	-22.00	A	1.0
9747.61	44.27	38.53	5.90	36.60	9.50	0.00	42.60	74	-31.40	P	1.0
9747.61	42.36	38.53	5.90	36.60	9.50	0.00	40.69	54	-13.31	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 2).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4923.27	44.98	35.09	2.64	35.24	9.50	0.00	37.97	74	-36.03	P	1.0
4923.27	32.67	35.09	2.64	35.24	9.50	0.00	25.66	54	-28.34	A	1.0
7387.99	41.58	39.74	4.86	35.62	9.50	0.00	41.06	74	-32.94	P	1.0
7387.99	32.69	39.74	4.86	35.62	9.50	0.00	32.17	54	-21.83	A	1.0
9848.16	41.74	38.52	5.90	36.76	9.50	0.00	39.90	74	-34.10	P	1.0
9848.16	32.14	38.52	5.90	36.76	9.50	0.00	30.30	54	-23.70	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 2).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4923.11	42.69	35.09	2.64	35.24	9.50	0.00	35.68	74	-38.32	P	1.0
4923.11	31.58	35.09	2.64	35.24	9.50	0.00	24.57	54	-29.43	A	1.0
7387.05	42.69	39.75	4.85	35.62	9.50	0.00	42.17	74	-31.83	P	1.0
7387.05	32.73	39.75	4.85	35.62	9.50	0.00	32.21	54	-21.79	A	1.0
9847.83	43.28	38.52	5.90	36.76	9.50	0.00	41.44	74	-32.56	P	1.0
9847.83	32.69	38.52	5.90	36.76	9.50	0.00	30.85	54	-23.15	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 2).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
3288.00	45.63	31.53	3.32	35.61	9.50	0.00	35.36	74	-38.64	P	1.0
3288.00	32.47	31.53	3.32	35.61	9.50	0.00	22.20	54	-31.80	A	1.0
7236.05	42.58	39.81	4.79	35.65	9.50	0.00	42.03	74	-31.97	P	1.0
7236.05	32.14	39.81	4.79	35.65	9.50	0.00	31.59	54	-22.41	A	1.0
9647.88	43.28	38.54	5.90	36.44	9.50	0.00	41.78	74	-32.22	P	1.0
9647.88	33.24	38.54	5.90	36.44	9.50	0.00	31.74	54	-22.26	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 2).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4824.16	45.32	34.44	2.82	35.16	9.50	0.00	37.92	74	-36.08	P	1.0
4824.16	33.21	34.44	2.82	35.16	9.50	0.00	25.81	54	-28.19	A	1.0
7237.55	42.58	39.80	4.80	35.65	9.50	0.00	42.03	74	-31.97	P	1.0
7237.55	32.61	39.80	4.80	35.65	9.50	0.00	32.06	54	-21.94	A	1.0
9648.83	41.87	38.54	5.90	36.44	9.50	0.00	40.37	74	-33.63	P	1.0
9648.83	32.48	38.54	5.90	36.44	9.50	0.00	30.98	54	-23.02	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 2).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4873.83	43.98	34.77	2.73	35.20	9.50	0.00	36.78	74	-37.22	P	1.0
4873.83	32.54	34.77	2.73	35.20	9.50	0.00	25.34	54	-28.66	A	1.0
7312.22	42.21	39.78	4.82	35.64	9.50	0.00	41.67	74	-32.33	P	1.0
7312.22	32.24	39.78	4.82	35.64	9.50	0.00	31.70	54	-22.30	A	1.0
9747.94	41.25	38.53	5.90	36.60	9.50	0.00	39.58	74	-34.42	P	1.0
9747.94	31.25	38.53	5.90	36.60	9.50	0.00	29.58	54	-24.42	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 2).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4873.16	43.74	34.76	2.73	35.20	9.50	0.00	36.53	74	-37.47	P	1.0
4873.16	32.41	34.76	2.73	35.20	9.50	0.00	25.20	54	-28.80	A	1.0
7311.55	43.87	39.78	4.82	35.64	9.50	0.00	43.33	74	-30.67	P	1.0
7311.55	32.25	39.78	4.82	35.64	9.50	0.00	31.71	54	-22.29	A	1.0
9747.61	43.85	38.53	5.90	36.60	9.50	0.00	42.18	74	-31.82	P	1.0
9747.61	32.11	38.53	5.90	36.60	9.50	0.00	30.44	54	-23.56	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 2).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4923.27	46.87	35.09	2.64	35.24	9.50	0.00	39.86	74	-34.14	P	1.0
4923.27	33.47	35.09	2.64	35.24	9.50	0.00	26.46	54	-27.54	A	1.0
7387.99	42.69	39.74	4.86	35.62	9.50	0.00	42.17	74	-31.83	P	1.0
7387.99	32.58	39.74	4.86	35.62	9.50	0.00	32.06	54	-21.94	A	1.0
9848.16	43.78	38.52	5.90	36.76	9.50	0.00	41.94	74	-32.06	P	1.0
9848.16	36.52	38.52	5.90	36.76	9.50	0.00	34.68	54	-19.32	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 2).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4923.11	44.52	35.09	2.64	35.24	9.50	0.00	37.51	74	-36.49	P	1.0
4923.11	33.14	35.09	2.64	35.24	9.50	0.00	26.13	54	-27.87	A	1.0
7387.05	42.68	39.75	4.85	35.62	9.50	0.00	42.16	74	-31.84	P	1.0
7387.05	32.56	39.75	4.85	35.62	9.50	0.00	32.04	54	-21.96	A	1.0
9847.83	43.74	38.52	5.90	36.76	9.50	0.00	41.90	74	-32.10	P	1.0
9847.83	32.69	38.52	5.90	36.76	9.50	0.00	30.85	54	-23.15	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 2).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4823.61	45.69	34.44	2.82	35.16	9.50	0.00	38.28	74	-35.72	P	1.0
4823.61	32.62	34.44	2.82	35.16	9.50	0.00	25.21	54	-28.79	A	1.0
7236.05	42.87	39.81	4.79	35.65	9.50	0.00	42.32	74	-31.68	P	1.0
7236.05	31.68	39.81	4.79	35.65	9.50	0.00	31.13	54	-22.87	A	1.0
9647.88	43.25	38.54	5.90	36.44	9.50	0.00	41.75	74	-32.25	P	1.0
9647.88	33.18	38.54	5.90	36.44	9.50	0.00	31.68	54	-22.32	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 3).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4824.16	46.89	34.44	2.82	35.16	9.50	0.00	39.49	74	-34.51	P	1.0
4824.16	33.14	34.44	2.82	35.16	9.50	0.00	25.74	54	-28.26	A	1.0
7237.55	44.25	39.80	4.80	35.65	9.50	0.00	43.70	74	-30.30	P	1.0
7237.55	33.47	39.80	4.80	35.65	9.50	0.00	32.92	54	-21.08	A	1.0
9648.83	42.87	38.54	5.90	36.44	9.50	0.00	41.37	74	-32.63	P	1.0
9648.83	32.88	38.54	5.90	36.44	9.50	0.00	31.38	54	-22.62	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 3).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4873.83	43.87	34.77	2.73	35.20	9.50	0.00	36.67	74	-37.33	P	1.0
4873.83	32.84	34.77	2.73	35.20	9.50	0.00	25.64	54	-28.36	A	1.0
7312.22	42.58	39.78	4.82	35.64	9.50	0.00	42.04	74	-31.96	P	1.0
7312.22	32.85	39.78	4.82	35.64	9.50	0.00	32.31	54	-21.69	A	1.0
9747.94	43.87	38.53	5.90	36.60	9.50	0.00	42.20	74	-31.80	P	1.0
9747.94	32.71	38.53	5.90	36.60	9.50	0.00	31.04	54	-22.96	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 3).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4873.16	45.25	34.76	2.73	35.20	9.50	0.00	38.04	74	-35.96	P	1.0
4873.16	32.87	34.76	2.73	35.20	9.50	0.00	25.66	54	-28.34	A	1.0
7311.55	43.25	39.78	4.82	35.64	9.50	0.00	42.71	74	-31.29	P	1.0
7311.55	32.68	39.78	4.82	35.64	9.50	0.00	32.14	54	-21.86	A	1.0
9747.61	43.89	38.53	5.90	36.60	9.50	0.00	42.22	74	-31.78	P	1.0
9747.61	33.58	38.53	5.90	36.60	9.50	0.00	31.91	54	-22.09	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 3).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4923.27	45.63	35.09	2.64	35.24	9.50	0.00	38.62	74	-35.38	P	1.0
4923.27	33.25	35.09	2.64	35.24	9.50	0.00	26.24	54	-27.76	A	1.0
7387.99	42.84	39.74	4.86	35.62	9.50	0.00	42.32	74	-31.68	P	1.0
7387.99	33.61	39.74	4.86	35.62	9.50	0.00	33.09	54	-20.91	A	1.0
9848.16	42.85	38.52	5.90	36.76	9.50	0.00	41.01	74	-32.99	P	1.0
9848.16	31.54	38.52	5.90	36.76	9.50	0.00	29.70	54	-24.30	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 3).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4923.11	43.58	35.09	2.64	35.24	9.50	0.00	36.57	74	-37.43	P	1.0
4923.11	32.54	35.09	2.64	35.24	9.50	0.00	25.53	54	-28.47	A	1.0
7387.05	43.69	39.75	4.85	35.62	9.50	0.00	43.17	74	-30.83	P	1.0
7387.05	33.54	39.75	4.85	35.62	9.50	0.00	33.02	54	-20.98	A	1.0
9847.83	42.58	38.52	5.90	36.76	9.50	0.00	40.74	74	-33.26	P	1.0
9847.83	33.81	38.52	5.90	36.76	9.50	0.00	31.97	54	-22.03	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 3).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
3288.00	44.35	31.53	3.32	35.61	9.50	0.00	34.08	74	-39.92	P	1.0
3288.00	33.25	31.53	3.32	35.61	9.50	0.00	22.98	54	-31.02	A	1.0
7236.05	43.58	39.81	4.79	35.65	9.50	0.00	43.03	74	-30.97	P	1.0
7236.05	32.55	39.81	4.79	35.65	9.50	0.00	32.00	54	-22.00	A	1.0
9647.88	42.98	38.54	5.90	36.44	9.50	0.00	41.48	74	-32.52	P	1.0
9647.88	32.57	38.54	5.90	36.44	9.50	0.00	31.07	54	-22.93	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 3).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4824.16	45.21	34.44	2.82	35.16	9.50	0.00	37.81	74	-36.19	P	1.0
4824.16	32.57	34.44	2.82	35.16	9.50	0.00	25.17	54	-28.83	A	1.0
7237.55	41.36	39.80	4.80	35.65	9.50	0.00	40.81	74	-33.19	P	1.0
7237.55	32.47	39.80	4.80	35.65	9.50	0.00	31.92	54	-22.08	A	1.0
9648.83	40.36	38.54	5.90	36.44	9.50	0.00	38.86	74	-35.14	P	1.0
9648.83	32.64	38.54	5.90	36.44	9.50	0.00	31.14	54	-22.86	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 3).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4873.83	44.36	34.77	2.73	35.20	9.50	0.00	37.16	74	-36.84	P	1.0
4873.83	33.58	34.77	2.73	35.20	9.50	0.00	26.38	54	-27.62	A	1.0
7312.22	41.25	39.78	4.82	35.64	9.50	0.00	40.71	74	-33.29	P	1.0
7312.22	31.25	39.78	4.82	35.64	9.50	0.00	30.71	54	-23.29	A	1.0
9747.94	41.58	38.53	5.90	36.60	9.50	0.00	39.91	74	-34.09	P	1.0
9747.94	32.78	38.53	5.90	36.60	9.50	0.00	31.11	54	-22.89	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 3).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4873.16	41.63	34.76	2.73	35.20	9.50	0.00	34.42	74	-39.58	P	1.0
4873.16	32.58	34.76	2.73	35.20	9.50	0.00	25.37	54	-28.63	A	1.0
7311.55	42.74	39.78	4.82	35.64	9.50	0.00	42.20	74	-31.80	P	1.0
7311.55	32.65	39.78	4.82	35.64	9.50	0.00	32.11	54	-21.89	A	1.0
9747.61	42.68	38.53	5.90	36.60	9.50	0.00	41.01	74	-32.99	P	1.0
9747.61	33.46	38.53	5.90	36.60	9.50	0.00	31.79	54	-22.21	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 3).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4923.27	45.96	35.09	2.64	35.24	9.50	0.00	38.95	74	-35.05	P	1.0
4923.27	32.64	35.09	2.64	35.24	9.50	0.00	25.63	54	-28.37	A	1.0
7387.99	42.87	39.74	4.86	35.62	9.50	0.00	42.35	74	-31.65	P	1.0
7387.99	31.54	39.74	4.86	35.62	9.50	0.00	31.02	54	-22.98	A	1.0
9848.16	42.87	38.52	5.90	36.76	9.50	0.00	41.03	74	-32.97	P	1.0
9848.16	36.46	38.52	5.90	36.76	9.50	0.00	34.62	54	-19.38	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 3).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4923.11	43.27	35.09	2.64	35.24	9.50	0.00	36.26	74	-37.74	P	1.0
4923.11	32.46	35.09	2.64	35.24	9.50	0.00	25.45	54	-28.55	A	1.0
7387.05	42.37	39.75	4.85	35.62	9.50	0.00	41.85	74	-32.15	P	1.0
7387.05	32.54	39.75	4.85	35.62	9.50	0.00	32.02	54	-21.98	A	1.0
9847.83	42.87	38.52	5.90	36.76	9.50	0.00	41.03	74	-32.97	P	1.0
9847.83	33.58	38.52	5.90	36.76	9.50	0.00	31.74	54	-22.26	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 3).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4823.61	46.27	34.44	2.82	35.16	9.50	0.00	38.86	74	-35.14	P	1.0
4823.61	33.24	34.44	2.82	35.16	9.50	0.00	25.83	54	-28.17	A	1.0
7236.05	43.24	39.81	4.79	35.65	9.50	0.00	42.69	74	-31.31	P	1.0
7236.05	32.54	39.81	4.79	35.65	9.50	0.00	31.99	54	-22.01	A	1.0
9647.88	4.67	38.54	5.90	36.44	9.50	0.00	3.17	74	-70.83	P	1.0
9647.88	32.57	38.54	5.90	36.44	9.50	0.00	31.07	54	-22.93	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 4).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4824.16	45.87	34.44	2.82	35.16	9.50	0.00	38.47	74	-35.53	P	1.0
4824.16	32.54	34.44	2.82	35.16	9.50	0.00	25.14	54	-28.86	A	1.0
7237.55	43.25	39.80	4.80	35.65	9.50	0.00	42.70	74	-31.30	P	1.0
7237.55	33.57	39.80	4.80	35.65	9.50	0.00	33.02	54	-20.98	A	1.0
9648.83	43.27	38.54	5.90	36.44	9.50	0.00	41.77	74	-32.23	P	1.0
9648.83	33.85	38.54	5.90	36.44	9.50	0.00	32.35	54	-21.65	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 4).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4873.83	44.47	34.77	2.73	35.20	9.50	0.00	37.27	74	-36.73	P	1.0
4873.83	33.84	34.77	2.73	35.20	9.50	0.00	26.64	54	-27.36	A	1.0
7312.22	42.57	39.78	4.82	35.64	9.50	0.00	42.03	74	-31.97	P	1.0
7312.22	33.47	39.78	4.82	35.64	9.50	0.00	32.93	54	-21.07	A	1.0
9747.94	43.54	38.53	5.90	36.60	9.50	0.00	41.87	74	-32.13	P	1.0
9747.94	33.71	38.53	5.90	36.60	9.50	0.00	32.04	54	-21.96	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 4).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4873.16	46.27	34.76	2.73	35.20	9.50	0.00	39.06	74	-34.94	P	1.0
4873.16	33.57	34.76	2.73	35.20	9.50	0.00	26.36	54	-27.64	A	1.0
7311.55	43.74	39.78	4.82	35.64	9.50	0.00	43.20	74	-30.80	P	1.0
7311.55	33.57	39.78	4.82	35.64	9.50	0.00	33.03	54	-20.97	A	1.0
9747.61	44.81	38.53	5.90	36.60	9.50	0.00	43.14	74	-30.86	P	1.0
9747.61	34.36	38.53	5.90	36.60	9.50	0.00	32.69	54	-21.31	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 4).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4923.27	46.87	35.09	2.64	35.24	9.50	0.00	39.86	74	-34.14	P	1.0
4923.27	34.65	35.09	2.64	35.24	9.50	0.00	27.64	54	-26.36	A	1.0
7387.99	43.24	39.74	4.86	35.62	9.50	0.00	42.72	74	-31.28	P	1.0
7387.99	33.64	39.74	4.86	35.62	9.50	0.00	33.12	54	-20.88	A	1.0
9848.16	43.73	38.52	5.90	36.76	9.50	0.00	41.89	74	-32.11	P	1.0
9848.16	32.74	38.52	5.90	36.76	9.50	0.00	30.90	54	-23.10	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 4).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4923.11	44.57	35.09	2.64	35.24	9.50	0.00	37.56	74	-36.44	P	1.0
4923.11	34.75	35.09	2.64	35.24	9.50	0.00	27.74	54	-26.26	A	1.0
7387.05	43.87	39.75	4.85	35.62	9.50	0.00	43.35	74	-30.65	P	1.0
7387.05	34.57	39.75	4.85	35.62	9.50	0.00	34.05	54	-19.95	A	1.0
9847.83	43.57	38.52	5.90	36.76	9.50	0.00	41.73	74	-32.27	P	1.0
9847.83	34.25	38.52	5.90	36.76	9.50	0.00	32.41	54	-21.59	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11b mode at 11Mbps (Antenna 4).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
3288.00	43.25	31.53	3.32	35.61	9.50	0.00	32.98	74	-41.02	P	1.0
3288.00	32.54	31.53	3.32	35.61	9.50	0.00	22.27	54	-31.73	A	1.0
7236.05	42.58	39.81	4.79	35.65	9.50	0.00	42.03	74	-31.97	P	1.0
7236.05	33.41	39.81	4.79	35.65	9.50	0.00	32.86	54	-21.14	A	1.0
9647.88	43.12	38.54	5.90	36.44	9.50	0.00	41.62	74	-32.38	P	1.0
9647.88	32.47	38.54	5.90	36.44	9.50	0.00	30.97	54	-23.03	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 4).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4824.16	44.35	34.44	2.82	35.16	9.50	0.00	36.95	74	-37.05	P	1.0
4824.16	33.37	34.44	2.82	35.16	9.50	0.00	25.97	54	-28.03	A	1.0
7237.55	42.87	39.80	4.80	35.65	9.50	0.00	42.32	74	-31.68	P	1.0
7237.55	32.81	39.80	4.80	35.65	9.50	0.00	32.26	54	-21.74	A	1.0
9648.83	40.83	38.54	5.90	36.44	9.50	0.00	39.33	74	-34.67	P	1.0
9648.83	33.74	38.54	5.90	36.44	9.50	0.00	32.24	54	-21.76	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 4).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4873.83	43.28	34.77	2.73	35.20	9.50	0.00	36.08	74	-37.92	P	1.0
4873.83	33.58	34.77	2.73	35.20	9.50	0.00	26.38	54	-27.62	A	1.0
7312.22	41.87	39.78	4.82	35.64	9.50	0.00	41.33	74	-32.67	P	1.0
7312.22	32.54	39.78	4.82	35.64	9.50	0.00	32.00	54	-22.00	A	1.0
9747.94	42.36	38.53	5.90	36.60	9.50	0.00	40.69	74	-33.31	P	1.0
9747.94	33.57	38.53	5.90	36.60	9.50	0.00	31.90	54	-22.10	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 4).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4873.16	42.57	34.76	2.73	35.20	9.50	0.00	35.36	74	-38.64	P	1.0
4873.16	33.54	34.76	2.73	35.20	9.50	0.00	26.33	54	-27.67	A	1.0
7311.55	41.63	39.78	4.82	35.64	9.50	0.00	41.09	74	-32.91	P	1.0
7311.55	32.54	39.78	4.82	35.64	9.50	0.00	32.00	54	-22.00	A	1.0
9747.61	42.87	38.53	5.90	36.60	9.50	0.00	41.20	74	-32.80	P	1.0
9747.61	33.11	38.53	5.90	36.60	9.50	0.00	31.44	54	-22.56	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 4).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 RX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4923.27	46.87	35.09	2.64	35.24	9.50	0.00	39.86	74	-34.14	P	1.0
4923.27	33.54	35.09	2.64	35.24	9.50	0.00	26.53	54	-27.47	A	1.0
7387.99	43.63	39.74	4.86	35.62	9.50	0.00	43.11	74	-30.89	P	1.0
7387.99	32.58	39.74	4.86	35.62	9.50	0.00	32.06	54	-21.94	A	1.0
9848.16	43.74	38.52	5.90	36.76	9.50	0.00	41.90	74	-32.10	P	1.0
9848.16	37.50	38.52	5.90	36.76	9.50	0.00	35.66	54	-18.34	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 4).

Test Requirement: 15.109 ,15.209
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/04/09
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 RX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
4923.11	44.57	35.09	2.64	35.24	9.50	0.00	37.56	74	-36.44	P	1.0
4923.11	33.54	35.09	2.64	35.24	9.50	0.00	26.53	54	-27.47	A	1.0
7387.05	43.27	39.75	4.85	35.62	9.50	0.00	42.75	74	-31.25	P	1.0
7387.05	33.54	39.75	4.85	35.62	9.50	0.00	33.02	54	-20.98	A	1.0
9847.83	43.60	38.52	5.90	36.76	9.50	0.00	41.76	74	-32.24	P	1.0
9847.83	31.57	38.52	5.90	36.76	9.50	0.00	29.73	54	-24.27	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
2. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
4. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
5. The test limit is 3M limit.
6. The frequency was searched to 18GHz.
7. The other emission levels were very low against the limit.
8. For Wireless 802.11g mode at 6Mbps (Antenna 4).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
* 2389.90	28.20	31.81	3.84	0.00	9.50	0.00	54.35	74	-19.65	P	1.00
* 2389.90	14.60	31.81	3.84	0.00	9.50	0.00	40.75	54	-13.25	A	1.00
2412.10	78.39	31.79	3.67	0.00	9.50	0.00	104.35	Fundamental Frequency		P	1.00
2412.10	68.67	31.79	3.67	0.00	9.50	0.00	94.63			A	1.00
* 4823.72	50.41	34.44	2.82	35.16	9.50	2.01	45.01	74	-28.99	P	1.00
* 4823.72	38.12	34.44	2.82	35.16	9.50	2.01	32.72	54	-21.28	A	1.00
7235.72	44.14	39.81	4.79	35.65	9.50	2.00	45.59	74	-28.41	P	1.00
7235.72	31.37	39.81	4.79	35.65	9.50	2.00	32.82	54	-21.18	A	1.00
9647.71	45.89	38.54	5.90	36.44	9.50	0.61	45.00	74	-29.00	P	1.00
9647.71	33.19	38.54	5.90	36.44	9.50	0.61	32.30	54	-21.70	A	1.00
* 12060.50	---	---	---	---	9.50	0.80	---	---	---	---	1.00
* 14472.60	---	---	---	---	0.00	0.67	---	---	---	---	1.00
16884.70	---	---	---	---	0.00	0.43	---	---	---	---	1.00
* 19296.80	---	---	---	---	0.00	1.96	---	---	---	---	1.00
21708.90	---	---	---	---	0.00	0.82	---	---	---	---	1.00
24121.00	---	---	---	---	0.00	2.91	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level=Reading + AF + Cable – Preamp + Filter – Dist, Margin = Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 1).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 TX				Measurement Distance at 1m Vertical polarity							
	Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
*	2389.90	39.20	31.81	3.84	0.00	9.50	0.00	65.35	74	-8.65	P	1.00
*	2389.90	26.10	31.81	3.84	0.00	9.50	0.00	52.25	54	-1.75	A	1.00
	2412.10	90.12	31.79	3.67	0.00	9.50	0.00	116.08	Fundamental Frequency		P	1.00
	2412.10	81.04	31.79	3.67	0.00	9.50	0.00	107.00			A	1.00
*	4823.88	58.11	34.44	2.82	35.16	9.50	2.00	52.71	74	-21.29	P	1.00
*	4823.88	46.70	34.44	2.82	35.16	9.50	2.00	41.30	54	-12.70	A	1.00
	7235.72	50.49	39.81	4.79	35.65	9.50	2.00	51.94	74	-22.06	P	1.00
	7235.72	40.76	39.81	4.79	35.65	9.50	2.00	42.21	54	-11.79	A	1.00
	9647.71	49.01	38.54	5.90	36.44	9.50	0.61	48.12	74	-25.88	P	1.00
	9647.71	42.28	38.54	5.90	36.44	9.50	0.61	41.39	54	-12.61	A	1.00
*	12060.50	---	---	---	---	9.50	0.80	---	---	---	---	1.00
*	14472.60	---	---	---	---	0.00	0.67	---	---	---	---	1.00
	16884.70	---	---	---	---	0.00	0.43	---	---	---	---	1.00
*	19296.80	---	---	---	---	0.00	1.96	---	---	---	---	1.00
	21708.90	---	---	---	---	0.00	0.82	---	---	---	---	1.00
	24121.00	---	---	---	---	0.00	2.91	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 1).
10. The test data marked in gray background means the EUT emission data is located in the margin uncertainty range of emission limits.

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2436.11	80.12	31.76	3.49	0.00	9.50	0.00	105.87	Fundamental Frequency		P	1.00
2436.11	71.46	31.76	3.49	0.00	9.50	0.00	97.21			A	1.00
* 4874.05	53.00	34.77	2.73	35.20	9.50	1.80	47.60	74	-26.40	P	1.00
* 4874.05	40.79	34.77	2.73	35.20	9.50	1.80	35.39	54	-18.61	A	1.00
* 7312.19	52.16	39.78	4.82	35.64	9.50	2.00	53.62	74	-20.38	P	1.00
* 7312.19	41.47	39.78	4.82	35.64	9.50	2.00	42.93	54	-11.07	A	1.00
9747.76	52.06	38.53	5.90	36.60	9.50	0.55	50.94	74	-23.06	P	1.00
9747.76	46.27	38.53	5.90	36.60	9.50	0.55	45.15	54	-8.85	A	1.00
* 12180.55	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14616.66	---	---	---	---	0.00	0.61	---	---	---	---	1.00
17052.77	---	---	---	---	0.00	0.52	---	---	---	---	1.00
* 19488.88	---	---	---	---	0.00	2.19	---	---	---	---	1.00
21924.99	---	---	---	---	0.00	0.73	---	---	---	---	1.00
24361.10	---	---	---	---	0.00	2.52	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 1).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2434.50	93.03	31.77	3.50	0.00	9.50	0.00	118.79	Fundamental Frequency		P	1.00
2434.50	84.30	31.77	3.50	0.00	9.50	0.00	110.06			A	1.00
* 4876.00	59.71	34.78	2.72	35.20	9.50	1.80	54.31	74	-19.69	P	1.00
* 4876.00	47.95	34.78	2.72	35.20	9.50	1.80	42.55	54	-11.45	A	1.00
* 7311.30	52.24	39.78	4.82	35.64	9.50	2.00	53.70	74	-20.30	P	1.00
* 7311.30	42.01	39.78	4.82	35.64	9.50	2.00	43.47	54	-10.53	A	1.00
9748.06	51.94	38.53	5.90	36.60	9.50	0.55	50.82	74	-23.18	P	1.00
9748.06	46.65	38.53	5.90	36.60	9.50	0.55	45.53	54	-8.47	A	1.00
* 12172.50	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14607.00	---	---	---	---	0.00	0.61	---	---	---	---	1.00
17041.50	---	---	---	---	0.00	0.52	---	---	---	---	1.00
* 19476.00	---	---	---	---	0.00	2.17	---	---	---	---	1.00
21910.50	---	---	---	---	0.00	0.74	---	---	---	---	1.00
24345.00	---	---	---	---	0.00	2.55	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 1).
10 The test data marked in gray background means the EUT emission data is located in the margin uncertainty range of emission limits.

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2461.77	75.07	31.74	3.29	0.00	9.50	0.00	100.60	Fundamental Frequency		P	1.00
2461.77	66.11	31.74	3.29	0.00	9.50	0.00	91.64			A	1.00
2448.20	24.10	31.75	3.39	0.00	9.50	0.00	49.75	74	-24.25	P	1.00
2448.20	11.90	31.75	3.39	0.00	9.50	0.00	37.55	54	-16.45	A	1.00
* 4923.88	52.01	35.10	2.64	35.24	9.50	1.60	46.61	74	-27.39	P	1.00
* 4923.88	37.31	35.10	2.64	35.24	9.50	1.60	31.91	54	-22.09	A	1.00
* 7386.33	46.22	39.75	4.85	35.62	9.50	2.00	47.70	74	-26.30	P	1.00
* 7386.33	35.18	39.75	4.85	35.62	9.50	2.00	36.66	54	-17.34	A	1.00
9847.68	45.60	38.52	5.90	36.76	9.50	0.49	44.25	74	-29.75	P	1.00
9847.68	32.15	38.52	5.90	36.76	9.50	0.49	30.80	54	-23.20	A	1.00
* 12308.85	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14770.62	---	---	---	---	0.00	0.48	---	---	---	---	1.00
17232.39	---	---	---	---	0.00	0.59	---	---	---	---	1.00
* 19694.16	---	---	---	---	0.00	2.39	---	---	---	---	1.00
* 22155.93	---	---	---	---	0.00	0.70	---	---	---	---	1.00
24617.70	---	---	---	---	0.00	2.14	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 1).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2461.66	88.29	31.74	3.29	0.00	9.50	0.00	113.82	Fundamental Frequency		P	1.00
2461.66	79.17	31.74	3.29	0.00	9.50	0.00	104.70			A	1.00
* 2488.20	37.70	31.71	3.09	0.00	9.50	0.00	63.00	74	-11.00	P	1.00
* 2488.20	25.80	31.71	3.09	0.00	9.50	0.00	51.10	54	-2.90	A	1.00
* 4923.88	61.99	35.10	2.64	35.24	9.50	1.60	56.59	74	-17.41	P	1.00
* 4923.88	48.15	35.10	2.64	35.24	9.50	1.60	42.75	54	-11.25	A	1.00
* 7385.38	47.62	39.75	4.85	35.62	9.50	2.00	49.10	74	-24.90	P	1.00
* 7385.38	35.40	39.75	4.85	35.62	9.50	2.00	36.88	54	-17.12	A	1.00
9847.81	44.80	38.52	5.90	36.76	9.50	0.49	43.45	74	-30.55	P	1.00
9847.81	32.18	38.52	5.90	36.76	9.50	0.49	30.83	54	-23.17	A	1.00
* 12308.30	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14769.96	---	---	---	---	0.00	0.48	---	---	---	---	1.00
17231.62	---	---	---	---	0.00	0.59	---	---	---	---	1.00
* 19693.28	---	---	---	---	0.00	2.39	---	---	---	---	1.00
* 22154.94	---	---	---	---	0.00	0.70	---	---	---	---	1.00
24616.60	---	---	---	---	0.00	2.14	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 1).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
* 2389.90	32.60	31.81	3.84	0.00	9.50	0.00	58.75	74	-15.25	P	1.00
* 2389.90	13.70	31.81	3.84	0.00	9.50	0.00	39.85	54	-14.15	A	1.00
2412.00	73.08	31.79	3.67	0.00	9.50	0.00	99.04	Fundamental Frequency		P	1.00
2412.00	62.54	31.79	3.67	0.00	9.50	0.00	88.50			A	1.00
* 4823.86	42.84	34.44	2.82	35.16	9.50	2.00	37.44	74	-36.56	P	1.00
* 4823.86	31.44	34.44	2.82	35.16	9.50	2.00	26.04	54	-27.96	A	1.00
7236.00	41.36	39.81	4.79	35.65	9.50	2.00	42.81	74	-31.19	P	1.00
7236.00	29.54	39.81	4.79	35.65	9.50	2.00	30.99	54	-23.01	A	1.00
9648.00	44.82	38.54	5.90	36.44	9.50	0.61	43.93	74	-30.07	P	1.00
9648.00	33.42	38.54	5.90	36.44	9.50	0.61	32.53	54	-21.47	A	1.00
* 12060.00	---	---	---	---	9.50	0.80	---	------	------	------	1.00
* 14472.00	---	---	---	---	0.00	0.67	---	------	------	------	1.00
16884.00	---	---	---	---	0.00	0.43	---	------	------	------	1.00
* 19296.00	---	---	---	---	0.00	1.96	---	------	------	------	1.00
21708.00	---	---	---	---	0.00	0.82	---	------	------	------	1.00
24120.00	---	---	---	---	0.00	2.91	---	------	------	------	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level=Reading + AF + Cable – Preamp + Filter – Dist, Margin = Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 1).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 TX				Measurement Distance at 1m Vertical polarity							
	Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
*	2389.90	44.80	31.81	3.84	0.00	9.50	0.00	70.95	74	-3.05	P	1.00
*	2389.90	25.60	31.81	3.84	0.00	9.50	0.00	51.75	54	-2.25	A	1.00
	2413.40	85.43	31.79	3.66	0.00	9.50	0.00	111.37	Fundamental Frequency		P	1.00
	2413.40	74.50	31.79	3.66	0.00	9.50	0.00	100.44			A	1.00
*	4821.49	52.50	34.42	2.82	35.16	9.50	2.01	47.10	74	-26.90	P	1.00
*	4821.49	38.55	34.42	2.82	35.16	9.50	2.01	33.15	54	-20.85	A	1.00
	7235.72	46.31	39.81	4.79	35.65	9.50	2.00	47.76	74	-26.24	P	1.00
	7235.72	33.09	39.81	4.79	35.65	9.50	2.00	34.54	54	-19.46	A	1.00
	9647.85	45.37	38.54	5.90	36.44	9.50	0.61	44.48	74	-29.52	P	1.00
	9647.85	33.73	38.54	5.90	36.44	9.50	0.61	32.84	54	-21.16	A	1.00
*	12067.00	---	---	---	---	9.50	0.80	---	---	---	---	1.00
*	14480.40	---	---	---	---	0.00	0.68	---	---	---	---	1.00
	16893.80	---	---	---	---	0.00	0.44	---	---	---	---	1.00
*	19307.20	---	---	---	---	0.00	1.97	---	---	---	---	1.00
	21720.60	---	---	---	---	0.00	0.81	---	---	---	---	1.00
	24134.00	---	---	---	---	0.00	2.89	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 1).
10 The test data marked in gray background means the EUT emission data is located in the margin uncertainty range of emission limits.

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2436.89	74.06	31.76	3.48	0.00	9.50	0.00	99.80	Fundamental Frequency		P	1.00
2436.89	63.69	31.76	3.48	0.00	9.50	0.00	89.43			A	1.00
* 4874.68	41.56	34.77	2.73	35.20	9.50	1.80	36.16	74	-37.84	P	1.00
* 4874.68	31.25	34.77	2.73	35.20	9.50	1.80	25.85	54	-28.15	A	1.00
* 7311.77	42.45	39.78	4.82	35.64	9.50	2.00	43.91	74	-30.09	P	1.00
* 7311.77	31.74	39.78	4.82	35.64	9.50	2.00	33.20	54	-20.80	A	1.00
9747.61	43.38	38.53	5.90	36.60	9.50	0.55	42.26	74	-31.74	P	1.00
9747.61	32.78	38.53	5.90	36.60	9.50	0.55	31.66	54	-22.34	A	1.00
* 12184.45	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14621.34	---	---	---	---	0.00	0.60	---	---	---	---	1.00
17058.23	---	---	---	---	0.00	0.52	---	---	---	---	1.00
* 19495.12	---	---	---	---	0.00	2.19	---	---	---	---	1.00
21932.01	---	---	---	---	0.00	0.73	---	---	---	---	1.00
24368.90	---	---	---	---	0.00	2.51	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 1).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2436.83	84.16	31.76	3.48	0.00	9.50	0.00	109.90	Fundamental Frequency		P	1.00
2436.83	74.91	31.76	3.48	0.00	9.50	0.00	100.65			A	1.00
* 4876.33	51.84	34.78	2.72	35.20	9.50	1.79	46.44	74	-27.56	P	1.00
* 4876.33	38.04	34.78	2.72	35.20	9.50	1.79	32.64	54	-21.36	A	1.00
* 7310.97	43.18	39.78	4.82	35.64	9.50	2.00	44.64	74	-29.36	P	1.00
* 7310.97	31.06	39.78	4.82	35.64	9.50	2.00	32.52	54	-21.48	A	1.00
9747.69	44.23	38.53	5.90	36.60	9.50	0.55	43.11	74	-30.89	P	1.00
9747.69	32.43	38.53	5.90	36.60	9.50	0.55	31.31	54	-22.69	A	1.00
* 12184.15	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14620.98	---	---	---	---	0.00	0.60	---	---	---	---	1.00
17057.81	---	---	---	---	0.00	0.52	---	---	---	---	1.00
* 19494.64	---	---	---	---	0.00	2.19	---	---	---	---	1.00
21931.47	---	---	---	---	0.00	0.73	---	---	---	---	1.00
24368.30	---	---	---	---	0.00	2.51	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 1).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2461.77	70.82	31.74	3.29	0.00	9.50	0.00	96.35	Fundamental Frequency		P	1.00
2461.77	61.15	31.74	3.29	0.00	9.50	0.00	86.68			A	1.00
* 2483.60	27.90	31.72	3.12	0.00	9.50	0.00	53.24	74	-20.76	P	1.00
* 2483.60	12.10	31.72	3.12	0.00	9.50	0.00	37.44	54	-16.56	A	1.00
* 4925.33	45.42	35.11	2.63	35.24	9.50	1.60	40.02	74	-33.98	P	1.00
* 4925.33	33.22	35.11	2.63	35.24	9.50	1.60	27.82	54	-26.18	A	1.00
* 7386.33	43.69	39.75	4.85	35.62	9.50	2.00	45.17	74	-28.83	P	1.00
* 7386.33	31.42	39.75	4.85	35.62	9.50	2.00	32.90	54	-21.10	A	1.00
9847.68	44.27	38.52	5.90	36.76	9.50	0.49	42.92	74	-31.08	P	1.00
9847.68	32.81	38.52	5.90	36.76	9.50	0.49	31.46	54	-22.54	A	1.00
* 12308.85	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14770.62	---	---	---	---	0.00	0.48	---	---	---	---	1.00
17232.39	---	---	---	---	0.00	0.59	---	---	---	---	1.00
* 19694.16	---	---	---	---	0.00	2.39	---	---	---	---	1.00
* 22155.93	---	---	---	---	0.00	0.70	---	---	---	---	1.00
24617.70	---	---	---	---	0.00	2.14	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 1).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2461.88	82.96	31.74	3.29	0.00	9.50	0.00	108.49	Fundamental Frequency		P	1.00
2461.88	73.03	31.74	3.29	0.00	9.50	0.00	98.56			A	1.00
* 2483.60	44.40	31.72	3.12	0.00	9.50	0.00	69.74	74	-4.26	P	1.00
* 2483.60	24.90	31.72	3.12	0.00	9.50	0.00	50.24	54	-3.76	A	1.00
* 4925.40	52.09	35.11	2.63	35.24	9.50	1.60	46.69	74	-27.31	P	1.00
* 4925.40	39.24	35.11	2.63	35.24	9.50	1.60	33.84	54	-20.16	A	1.00
* 7386.05	43.69	39.75	4.85	35.62	9.50	2.00	45.17	74	-28.83	P	1.00
* 7386.05	31.54	39.75	4.85	35.62	9.50	2.00	33.02	54	-20.98	A	1.00
9847.81	45.03	38.52	5.90	36.76	9.50	0.49	43.68	74	-30.32	P	1.00
9847.81	33.21	38.52	5.90	36.76	9.50	0.49	31.86	54	-22.14	A	1.00
* 12309.40	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14771.28	---	---	---	---	0.00	0.48	---	---	---	---	1.00
17233.16	---	---	---	---	0.00	0.59	---	---	---	---	1.00
* 19695.04	---	---	---	---	0.00	2.40	---	---	---	---	1.00
* 22156.92	---	---	---	---	0.00	0.70	---	---	---	---	1.00
24618.80	---	---	---	---	0.00	2.13	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 1).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/03/08
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
* 2389.90	28.36	31.81	3.84	0.00	9.50	0.00	54.51	74	-19.49	P	1.00
* 2389.90	14.54	31.81	3.84	0.00	9.50	0.00	40.69	54	-13.31	A	1.00
2412.10	78.54	31.79	3.67	0.00	9.50	0.00	104.50	Fundamental Frequency		P	1.00
2412.10	69.21	31.79	3.67	0.00	9.50	0.00	95.17			A	1.00
* 4823.72	49.89	34.44	2.82	35.16	9.50	2.01	44.49	74	-29.51	P	1.00
* 4823.72	38.34	34.44	2.82	35.16	9.50	2.01	32.94	54	-21.06	A	1.00
7235.72	43.87	39.81	4.79	35.65	9.50	2.00	45.32	74	-28.68	P	1.00
7235.72	32.01	39.81	4.79	35.65	9.50	2.00	33.46	54	-20.54	A	1.00
9647.71	45.67	38.54	5.90	36.44	9.50	0.61	44.78	74	-29.22	P	1.00
9647.71	32.68	38.54	5.90	36.44	9.50	0.61	31.79	54	-22.21	A	1.00
* 12060.50	---	---	---	---	9.50	0.80	---	---	---	---	1.00
* 14472.60	---	---	---	---	0.00	0.67	---	---	---	---	1.00
16884.70	---	---	---	---	0.00	0.43	---	---	---	---	1.00
* 19296.80	---	---	---	---	0.00	1.96	---	---	---	---	1.00
21708.90	---	---	---	---	0.00	0.82	---	---	---	---	1.00
24121.00	---	---	---	---	0.00	2.91	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level=Reading + AF + Cable – Preamp + Filter – Dist, Margin = Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 2).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 TX				Measurement Distance at 1m Vertical polarity							
	Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
*	2389.90	40.21	31.81	3.84	0.00	9.50	0.00	66.36	74	-7.64	P	1.00
*	2389.90	25.87	31.81	3.84	0.00	9.50	0.00	52.02	54	-1.98	A	1.00
	2412.10	91.36	31.79	3.67	0.00	9.50	0.00	117.32	Fundamental Frequency		P	1.00
	2412.10	82.34	31.79	3.67	0.00	9.50	0.00	108.30			A	1.00
*	4823.88	58.32	34.44	2.82	35.16	9.50	2.00	52.92	74	-21.08	P	1.00
*	4823.88	46.28	34.44	2.82	35.16	9.50	2.00	40.88	54	-13.12	A	1.00
	7235.72	49.99	39.81	4.79	35.65	9.50	2.00	51.44	74	-22.56	P	1.00
	7235.72	40.63	39.81	4.79	35.65	9.50	2.00	42.08	54	-11.92	A	1.00
	9647.71	48.87	38.54	5.90	36.44	9.50	0.61	47.98	74	-26.02	P	1.00
	9647.71	42.54	38.54	5.90	36.44	9.50	0.61	41.65	54	-12.35	A	1.00
*	12060.50	---	---	---	---	9.50	0.80	---	---	---	---	1.00
*	14472.60	---	---	---	---	0.00	0.67	---	---	---	---	1.00
	16884.70	---	---	---	---	0.00	0.43	---	---	---	---	1.00
*	19296.80	---	---	---	---	0.00	1.96	---	---	---	---	1.00
	21708.90	---	---	---	---	0.00	0.82	---	---	---	---	1.00
	24121.00	---	---	---	---	0.00	2.91	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 2).
10. The test data marked in gray background means the EUT emission data is located in the margin uncertainty range of emission limits.

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2436.11	81.36	31.76	3.49	0.00	9.50	0.00	107.11	Fundamental Frequency		P	1.00
2436.11	72.34	31.76	3.49	0.00	9.50	0.00	98.09			A	1.00
* 4874.05	53.21	34.77	2.73	35.20	9.50	1.80	47.81	74	-26.19	P	1.00
* 4874.05	41.36	34.77	2.73	35.20	9.50	1.80	35.96	54	-18.04	A	1.00
* 7312.19	52.36	39.78	4.82	35.64	9.50	2.00	53.82	74	-20.18	P	1.00
* 7312.19	42.32	39.78	4.82	35.64	9.50	2.00	43.78	54	-10.22	A	1.00
9747.76	52.57	38.53	5.90	36.60	9.50	0.55	51.45	74	-22.55	P	1.00
9747.76	45.31	38.53	5.90	36.60	9.50	0.55	44.19	54	-9.81	A	1.00
* 12180.55	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14616.66	---	---	---	---	0.00	0.61	---	---	---	---	1.00
17052.77	---	---	---	---	0.00	0.52	---	---	---	---	1.00
* 19488.88	---	---	---	---	0.00	2.19	---	---	---	---	1.00
21924.99	---	---	---	---	0.00	0.73	---	---	---	---	1.00
24361.10	---	---	---	---	0.00	2.52	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 2).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2434.50	93.24	31.77	3.50	0.00	9.50	0.00	119.00	Fundamental Frequency		P	1.00
2434.50	83.24	31.77	3.50	0.00	9.50	0.00	109.00			A	1.00
* 4876.00	59.54	34.78	2.72	35.20	9.50	1.80	54.14	74	-19.86	P	1.00
* 4876.00	47.63	34.78	2.72	35.20	9.50	1.80	42.23	54	-11.77	A	1.00
* 7311.30	52.42	39.78	4.82	35.64	9.50	2.00	53.88	74	-20.12	P	1.00
* 7311.30	42.63	39.78	4.82	35.64	9.50	2.00	44.09	54	-9.91	A	1.00
9748.06	51.88	38.53	5.90	36.60	9.50	0.55	50.76	74	-23.24	P	1.00
9748.06	46.78	38.53	5.90	36.60	9.50	0.55	45.66	54	-8.34	A	1.00
* 12172.50	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14607.00	---	---	---	---	0.00	0.61	---	---	---	---	1.00
17041.50	---	---	---	---	0.00	0.52	---	---	---	---	1.00
* 19476.00	---	---	---	---	0.00	2.17	---	---	---	---	1.00
21910.50	---	---	---	---	0.00	0.74	---	---	---	---	1.00
24345.00	---	---	---	---	0.00	2.55	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 2).
10 The test data marked in gray background means the EUT emission data is located in the margin uncertainty range of emission limits.

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2461.77	75.24	31.74	3.29	0.00	9.50	0.00	100.77	Fundamental Frequency		P	1.00
2461.77	66.32	31.74	3.29	0.00	9.50	0.00	91.85			A	1.00
2448.20	24.78	31.75	3.39	0.00	9.50	0.00	50.43	74	-23.57	P	1.00
2448.20	12.01	31.75	3.39	0.00	9.50	0.00	37.66	54	-16.34	A	1.00
* 4923.88	52.68	35.10	2.64	35.24	9.50	1.60	47.28	74	-26.72	P	1.00
* 4923.88	38.21	35.10	2.64	35.24	9.50	1.60	32.81	54	-21.19	A	1.00
* 7386.33	46.57	39.75	4.85	35.62	9.50	2.00	48.05	74	-25.95	P	1.00
* 7386.33	35.66	39.75	4.85	35.62	9.50	2.00	37.14	54	-16.86	A	1.00
9847.68	45.61	38.52	5.90	36.76	9.50	0.49	44.26	74	-29.74	P	1.00
9847.68	32.57	38.52	5.90	36.76	9.50	0.49	31.22	54	-22.78	A	1.00
* 12308.85	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14770.62	---	---	---	---	0.00	0.48	---	---	---	---	1.00
17232.39	---	---	---	---	0.00	0.59	---	---	---	---	1.00
* 19694.16	---	---	---	---	0.00	2.39	---	---	---	---	1.00
* 22155.93	---	---	---	---	0.00	0.70	---	---	---	---	1.00
24617.70	---	---	---	---	0.00	2.14	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 2).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2461.66	88.69	31.74	3.29	0.00	9.50	0.00	114.22	Fundamental Frequency		P	1.00
2461.66	79.52	31.74	3.29	0.00	9.50	0.00	105.05			A	1.00
* 2488.20	38.10	31.71	3.09	0.00	9.50	0.00	63.40	74	-10.60	P	1.00
* 2488.20	25.84	31.71	3.09	0.00	9.50	0.00	51.14	54	-2.86	A	1.00
* 4923.88	62.31	35.10	2.64	35.24	9.50	1.60	56.91	74	-17.09	P	1.00
* 4923.88	49.25	35.10	2.64	35.24	9.50	1.60	43.85	54	-10.15	A	1.00
* 7385.38	47.58	39.75	4.85	35.62	9.50	2.00	49.06	74	-24.94	P	1.00
* 7385.38	35.74	39.75	4.85	35.62	9.50	2.00	37.22	54	-16.78	A	1.00
9847.81	44.25	38.52	5.90	36.76	9.50	0.49	42.90	74	-31.10	P	1.00
9847.81	32.69	38.52	5.90	36.76	9.50	0.49	31.34	54	-22.66	A	1.00
* 12308.30	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14769.96	---	---	---	---	0.00	0.48	---	---	---	---	1.00
17231.62	---	---	---	---	0.00	0.59	---	---	---	---	1.00
* 19693.28	---	---	---	---	0.00	2.39	---	---	---	---	1.00
* 22154.94	---	---	---	---	0.00	0.70	---	---	---	---	1.00
24616.60	---	---	---	---	0.00	2.14	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 2).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	13℃, 74%

CH1 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
* 2389.90	32.41	31.81	3.84	0.00	9.50	0.00	58.56	74	-15.44	P	1.00
* 2389.90	13.58	31.81	3.84	0.00	9.50	0.00	39.73	54	-14.27	A	1.00
2412.00	73.26	31.79	3.67	0.00	9.50	0.00	99.22	Fundamental Frequency		P	1.00
2412.00	63.54	31.79	3.67	0.00	9.50	0.00	89.50			A	1.00
* 4823.86	42.56	34.44	2.82	35.16	9.50	2.00	37.16	74	-36.84	P	1.00
* 4823.86	31.66	34.44	2.82	35.16	9.50	2.00	26.26	54	-27.74	A	1.00
7236.00	42.31	39.81	4.79	35.65	9.50	2.00	43.76	74	-30.24	P	1.00
7236.00	30.25	39.81	4.79	35.65	9.50	2.00	31.70	54	-22.30	A	1.00
9648.00	43.26	38.54	5.90	36.44	9.50	0.61	42.37	74	-31.63	P	1.00
9648.00	32.74	38.54	5.90	36.44	9.50	0.61	31.85	54	-22.15	A	1.00
* 12060.00	---	---	---	---	9.50	0.80	---	---	---	---	1.00
* 14472.00	---	---	---	---	0.00	0.67	---	---	---	---	1.00
16884.00	---	---	---	---	0.00	0.43	---	---	---	---	1.00
* 19296.00	---	---	---	---	0.00	1.96	---	---	---	---	1.00
21708.00	---	---	---	---	0.00	0.82	---	---	---	---	1.00
24120.00	---	---	---	---	0.00	2.91	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level=Reading + AF + Cable – Preamp + Filter – Dist, Margin = Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 2).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	13℃, 74%

CH1 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
* 2389.90	43.58	31.81	3.84	0.00	9.50	0.00	69.73	74	-4.27	P	1.00
* 2389.90	24.89	31.81	3.84	0.00	9.50	0.00	51.04	54	-2.96	A	1.00
2413.40	86.34	31.79	3.66	0.00	9.50	0.00	112.28	Fundamental Frequency		P	1.00
2413.40	73.68	31.79	3.66	0.00	9.50	0.00	99.62			A	1.00
* 4821.49	51.88	34.42	2.82	35.16	9.50	2.01	46.48	74	-27.52	P	1.00
* 4821.49	38.24	34.42	2.82	35.16	9.50	2.01	32.84	54	-21.16	A	1.00
7235.72	45.78	39.81	4.79	35.65	9.50	2.00	47.23	74	-26.77	P	1.00
7235.72	33.58	39.81	4.79	35.65	9.50	2.00	35.03	54	-18.97	A	1.00
9647.85	45.31	38.54	5.90	36.44	9.50	0.61	44.42	74	-29.58	P	1.00
9647.85	32.68	38.54	5.90	36.44	9.50	0.61	31.79	54	-22.21	A	1.00
* 12067.00	---	---	---	---	9.50	0.80	---	---	---	---	1.00
* 14480.40	---	---	---	---	0.00	0.68	---	---	---	---	1.00
16893.80	---	---	---	---	0.00	0.44	---	---	---	---	1.00
* 19307.20	---	---	---	---	0.00	1.97	---	---	---	---	1.00
21720.60	---	---	---	---	0.00	0.81	---	---	---	---	1.00
24134.00	---	---	---	---	0.00	2.89	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 2).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	13℃, 74%

CH6 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2436.89	73.98	31.76	3.48	0.00	9.50	0.00	99.72	Fundamental Frequency		P	1.00
2436.89	63.22	31.76	3.48	0.00	9.50	0.00	88.96			A	1.00
* 4874.68	42.13	34.77	2.73	35.20	9.50	1.80	36.73	74	-37.27	P	1.00
* 4874.68	32.74	34.77	2.73	35.20	9.50	1.80	27.34	54	-26.66	A	1.00
* 7311.77	41.85	39.78	4.82	35.64	9.50	2.00	43.31	74	-30.69	P	1.00
* 7311.77	32.54	39.78	4.82	35.64	9.50	2.00	34.00	54	-20.00	A	1.00
9747.61	43.58	38.53	5.90	36.60	9.50	0.55	42.46	74	-31.54	P	1.00
9747.61	33.88	38.53	5.90	36.60	9.50	0.55	32.76	54	-21.24	A	1.00
* 12184.45	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14621.34	---	---	---	---	0.00	0.60	---	---	---	---	1.00
17058.23	---	---	---	---	0.00	0.52	---	---	---	---	1.00
* 19495.12	---	---	---	---	0.00	2.19	---	---	---	---	1.00
21932.01	---	---	---	---	0.00	0.73	---	---	---	---	1.00
24368.90	---	---	---	---	0.00	2.51	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 2).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	13℃, 74%

CH6 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2436.83	83.24	31.76	3.48	0.00	9.50	0.00	108.98	Fundamental Frequency		P	1.00
2436.83	74.84	31.76	3.48	0.00	9.50	0.00	100.58			A	1.00
* 4876.33	43.54	34.78	2.72	35.20	9.50	1.79	38.14	74	-35.86	P	1.00
* 4876.33	37.96	34.78	2.72	35.20	9.50	1.79	32.56	54	-21.44	A	1.00
* 7310.97	43.28	39.78	4.82	35.64	9.50	2.00	44.74	74	-29.26	P	1.00
* 7310.97	31.85	39.78	4.82	35.64	9.50	2.00	33.31	54	-20.69	A	1.00
9747.69	43.74	38.53	5.90	36.60	9.50	0.55	42.62	74	-31.38	P	1.00
9747.69	33.24	38.53	5.90	36.60	9.50	0.55	32.12	54	-21.88	A	1.00
* 12184.15	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14620.98	---	---	---	---	0.00	0.60	---	---	---	---	1.00
17057.81	---	---	---	---	0.00	0.52	---	---	---	---	1.00
* 19494.64	---	---	---	---	0.00	2.19	---	---	---	---	1.00
21931.47	---	---	---	---	0.00	0.73	---	---	---	---	1.00
24368.30	---	---	---	---	0.00	2.51	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 2).
10 The test data marked in gray background means the EUT emission data is located in the margin uncertainty range of emission limits.

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	13℃, 74%

CH11 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2461.77	70.89	31.74	3.29	0.00	9.50	0.00	96.42	Fundamental Frequency		P	1.00
2461.77	62.45	31.74	3.29	0.00	9.50	0.00	87.98			A	1.00
* 2483.60	28.30	31.72	3.12	0.00	9.50	0.00	53.64	74	-20.36	P	1.00
* 2483.60	12.41	31.72	3.12	0.00	9.50	0.00	37.75	54	-16.25	A	1.00
* 4925.33	44.85	35.11	2.63	35.24	9.50	1.60	39.45	74	-34.55	P	1.00
* 4925.33	33.54	35.11	2.63	35.24	9.50	1.60	28.14	54	-25.86	A	1.00
* 7386.33	43.69	39.75	4.85	35.62	9.50	2.00	45.17	74	-28.83	P	1.00
* 7386.33	32.51	39.75	4.85	35.62	9.50	2.00	33.99	54	-20.01	A	1.00
9847.68	45.52	38.52	5.90	36.76	9.50	0.49	44.17	74	-29.83	P	1.00
9847.68	31.87	38.52	5.90	36.76	9.50	0.49	30.52	54	-23.48	A	1.00
* 12308.85	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14770.62	---	---	---	---	0.00	0.48	---	---	---	---	1.00
17232.39	---	---	---	---	0.00	0.59	---	---	---	---	1.00
* 19694.16	---	---	---	---	0.00	2.39	---	---	---	---	1.00
* 22155.93	---	---	---	---	0.00	0.70	---	---	---	---	1.00
24617.70	---	---	---	---	0.00	2.14	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 2).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	13℃, 74%

CH11 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2461.88	82.54	31.74	3.29	0.00	9.50	0.00	108.07	Fundamental Frequency		P	1.00
2461.88	72.89	31.74	3.29	0.00	9.50	0.00	98.42			A	1.00
* 2483.60	43.60	31.72	3.12	0.00	9.50	0.00	68.94	74	-5.06	P	1.00
* 2483.60	25.31	31.72	3.12	0.00	9.50	0.00	50.65	54	-3.35	A	1.00
* 4925.40	52.61	35.11	2.63	35.24	9.50	1.60	47.21	74	-26.79	P	1.00
* 4925.40	39.54	35.11	2.63	35.24	9.50	1.60	34.14	54	-19.86	A	1.00
* 7386.05	44.21	39.75	4.85	35.62	9.50	2.00	45.69	74	-28.31	P	1.00
* 7386.05	32.51	39.75	4.85	35.62	9.50	2.00	33.99	54	-20.01	A	1.00
9847.81	44.87	38.52	5.90	36.76	9.50	0.49	43.52	74	-30.48	P	1.00
9847.81	32.64	38.52	5.90	36.76	9.50	0.49	31.29	54	-22.71	A	1.00
* 12309.40	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14771.28	---	---	---	---	0.00	0.48	---	---	---	---	1.00
17233.16	---	---	---	---	0.00	0.59	---	---	---	---	1.00
* 19695.04	---	---	---	---	0.00	2.40	---	---	---	---	1.00
* 22156.92	---	---	---	---	0.00	0.70	---	---	---	---	1.00
24618.80	---	---	---	---	0.00	2.13	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 2).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
* 2389.90	28.68	31.81	3.84	0.00	9.50	0.00	54.83	74	-19.17	P	1.00
* 2389.90	12.54	31.81	3.84	0.00	9.50	0.00	38.69	54	-15.31	A	1.00
2412.10	78.56	31.79	3.67	0.00	9.50	0.00	104.52	Fundamental Frequency		P	1.00
2412.10	68.98	31.79	3.67	0.00	9.50	0.00	94.94			A	1.00
* 4823.72	49.85	34.44	2.82	35.16	9.50	2.01	44.45	74	-29.55	P	1.00
* 4823.72	38.74	34.44	2.82	35.16	9.50	2.01	33.34	54	-20.66	A	1.00
7235.72	43.58	39.81	4.79	35.65	9.50	2.00	45.03	74	-28.97	P	1.00
7235.72	33.51	39.81	4.79	35.65	9.50	2.00	34.96	54	-19.04	A	1.00
9647.71	44.85	38.54	5.90	36.44	9.50	0.61	43.96	74	-30.04	P	1.00
9647.71	32.64	38.54	5.90	36.44	9.50	0.61	31.75	54	-22.25	A	1.00
* 12060.50	---	---	---	---	9.50	0.80	---	---	---	---	1.00
* 14472.60	---	---	---	---	0.00	0.67	---	---	---	---	1.00
16884.70	---	---	---	---	0.00	0.43	---	---	---	---	1.00
* 19296.80	---	---	---	---	0.00	1.96	---	---	---	---	1.00
21708.90	---	---	---	---	0.00	0.82	---	---	---	---	1.00
24121.00	---	---	---	---	0.00	2.91	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level=Reading + AF + Cable – Preamp + Filter – Dist, Margin = Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 3).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 TX				Measurement Distance at 1m Vertical polarity							
	Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
*	2389.90	40.35	31.81	3.84	0.00	9.50	0.00	66.50	74	-7.50	P	1.00
*	2389.90	25.22	31.81	3.84	0.00	9.50	0.00	51.37	54	-2.63	A	1.00
	2412.10	90.36	31.79	3.67	0.00	9.50	0.00	116.32	Fundamental Frequency		P	1.00
	2412.10	82.44	31.79	3.67	0.00	9.50	0.00	108.40			A	1.00
*	4823.88	59.63	34.44	2.82	35.16	9.50	2.00	54.23	74	-19.77	P	1.00
*	4823.88	45.21	34.44	2.82	35.16	9.50	2.00	39.81	54	-14.19	A	1.00
	7235.72	49.82	39.81	4.79	35.65	9.50	2.00	51.27	74	-22.73	P	1.00
	7235.72	40.35	39.81	4.79	35.65	9.50	2.00	41.80	54	-12.20	A	1.00
	9647.71	48.52	38.54	5.90	36.44	9.50	0.61	47.63	74	-26.37	P	1.00
	9647.71	43.25	38.54	5.90	36.44	9.50	0.61	42.36	54	-11.64	A	1.00
*	12060.50	---	---	---	---	9.50	0.80	---	---	---	---	1.00
*	14472.60	---	---	---	---	0.00	0.67	---	---	---	---	1.00
	16884.70	---	---	---	---	0.00	0.43	---	---	---	---	1.00
*	19296.80	---	---	---	---	0.00	1.96	---	---	---	---	1.00
	21708.90	---	---	---	---	0.00	0.82	---	---	---	---	1.00
	24121.00	---	---	---	---	0.00	2.91	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 3).
10. The test data marked in gray background means the EUT emission data is located in the margin uncertainty range of emission limits.

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2436.11	81.21	31.76	3.49	0.00	9.50	0.00	106.96	Fundamental Frequency		P	1.00
2436.11	72.14	31.76	3.49	0.00	9.50	0.00	97.89			A	1.00
* 4874.05	52.87	34.77	2.73	35.20	9.50	1.80	47.47	74	-26.53	P	1.00
* 4874.05	41.36	34.77	2.73	35.20	9.50	1.80	35.96	54	-18.04	A	1.00
* 7312.19	53.25	39.78	4.82	35.64	9.50	2.00	54.71	74	-19.29	P	1.00
* 7312.19	41.87	39.78	4.82	35.64	9.50	2.00	43.33	54	-10.67	A	1.00
9747.76	53.88	38.53	5.90	36.60	9.50	0.55	52.76	74	-21.24	P	1.00
9747.76	44.89	38.53	5.90	36.60	9.50	0.55	43.77	54	-10.23	A	1.00
* 12180.55	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14616.66	---	---	---	---	0.00	0.61	---	---	---	---	1.00
17052.77	---	---	---	---	0.00	0.52	---	---	---	---	1.00
* 19488.88	---	---	---	---	0.00	2.19	---	---	---	---	1.00
21924.99	---	---	---	---	0.00	0.73	---	---	---	---	1.00
24361.10	---	---	---	---	0.00	2.52	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 3).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2434.50	93.52	31.77	3.50	0.00	9.50	0.00	119.28	Fundamental Frequency		P	1.00
2434.50	83.24	31.77	3.50	0.00	9.50	0.00	109.00			A	1.00
* 4876.00	58.98	34.78	2.72	35.20	9.50	1.80	53.58	74	-20.42	P	1.00
* 4876.00	46.87	34.78	2.72	35.20	9.50	1.80	41.47	54	-12.53	A	1.00
* 7311.30	52.71	39.78	4.82	35.64	9.50	2.00	54.17	74	-19.83	P	1.00
* 7311.30	43.21	39.78	4.82	35.64	9.50	2.00	44.67	54	-9.33	A	1.00
9748.06	52.84	38.53	5.90	36.60	9.50	0.55	51.72	74	-22.28	P	1.00
9748.06	45.87	38.53	5.90	36.60	9.50	0.55	44.75	54	-9.25	A	1.00
* 12172.50	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14607.00	---	---	---	---	0.00	0.61	---	---	---	---	1.00
17041.50	---	---	---	---	0.00	0.52	---	---	---	---	1.00
* 19476.00	---	---	---	---	0.00	2.17	---	---	---	---	1.00
21910.50	---	---	---	---	0.00	0.74	---	---	---	---	1.00
24345.00	---	---	---	---	0.00	2.55	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 3).
10 The test data marked in gray background means the EUT emission data is located in the margin uncertainty range of emission limits.

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2461.77	75.34	31.74	3.29	0.00	9.50	0.00	100.87	Fundamental Frequency		P	1.00
2461.77	66.24	31.74	3.29	0.00	9.50	0.00	91.77			A	1.00
2448.20	24.85	31.75	3.39	0.00	9.50	0.00	50.50	74	-23.50	P	1.00
2448.20	12.34	31.75	3.39	0.00	9.50	0.00	37.99	54	-16.01	A	1.00
* 4923.88	53.24	35.10	2.64	35.24	9.50	1.60	47.84	74	-26.16	P	1.00
* 4923.88	38.47	35.10	2.64	35.24	9.50	1.60	33.07	54	-20.93	A	1.00
* 7386.33	45.63	39.75	4.85	35.62	9.50	2.00	47.11	74	-26.89	P	1.00
* 7386.33	36.33	39.75	4.85	35.62	9.50	2.00	37.81	54	-16.19	A	1.00
9847.68	47.21	38.52	5.90	36.76	9.50	0.49	45.86	74	-28.14	P	1.00
9847.68	30.56	38.52	5.90	36.76	9.50	0.49	29.21	54	-24.79	A	1.00
* 12308.85	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14770.62	---	---	---	---	0.00	0.48	---	---	---	---	1.00
17232.39	---	---	---	---	0.00	0.59	---	---	---	---	1.00
* 19694.16	---	---	---	---	0.00	2.39	---	---	---	---	1.00
* 22155.93	---	---	---	---	0.00	0.70	---	---	---	---	1.00
24617.70	---	---	---	---	0.00	2.14	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 3).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2461.66	87.96	31.74	3.29	0.00	9.50	0.00	113.49	Fundamental Frequency		P	1.00
2461.66	78.65	31.74	3.29	0.00	9.50	0.00	104.18			A	1.00
* 2488.20	38.44	31.71	3.09	0.00	9.50	0.00	63.74	74	-10.26	P	1.00
* 2488.20	25.47	31.71	3.09	0.00	9.50	0.00	50.77	54	-3.23	A	1.00
* 4923.88	62.35	35.10	2.64	35.24	9.50	1.60	56.95	74	-17.05	P	1.00
* 4923.88	48.65	35.10	2.64	35.24	9.50	1.60	43.25	54	-10.75	A	1.00
* 7385.38	48.52	39.75	4.85	35.62	9.50	2.00	50.00	74	-24.00	P	1.00
* 7385.38	34.66	39.75	4.85	35.62	9.50	2.00	36.14	54	-17.86	A	1.00
9847.81	44.52	38.52	5.90	36.76	9.50	0.49	43.17	74	-30.83	P	1.00
9847.81	33.57	38.52	5.90	36.76	9.50	0.49	32.22	54	-21.78	A	1.00
* 12308.30	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14769.96	---	---	---	---	0.00	0.48	---	---	---	---	1.00
17231.62	---	---	---	---	0.00	0.59	---	---	---	---	1.00
* 19693.28	---	---	---	---	0.00	2.39	---	---	---	---	1.00
* 22154.94	---	---	---	---	0.00	0.70	---	---	---	---	1.00
24616.60	---	---	---	---	0.00	2.14	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 3).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	13℃, 74%

CH1 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
* 2389.90	33.57	31.81	3.84	0.00	9.50	0.00	59.72	74	-14.28	P	1.00
* 2389.90	14.36	31.81	3.84	0.00	9.50	0.00	40.51	54	-13.49	A	1.00
2412.00	74.25	31.79	3.67	0.00	9.50	0.00	100.21	Fundamental Frequency		P	1.00
2412.00	62.38	31.79	3.67	0.00	9.50	0.00	88.34			A	1.00
* 4823.86	41.85	34.44	2.82	35.16	9.50	2.00	36.45	74	-37.55	P	1.00
* 4823.86	32.54	34.44	2.82	35.16	9.50	2.00	27.14	54	-26.86	A	1.00
7236.00	41.30	39.81	4.79	35.65	9.50	2.00	42.75	74	-31.25	P	1.00
7236.00	31.42	39.81	4.79	35.65	9.50	2.00	32.87	54	-21.13	A	1.00
9648.00	42.60	38.54	5.90	36.44	9.50	0.61	41.71	74	-32.29	P	1.00
9648.00	32.74	38.54	5.90	36.44	9.50	0.61	31.85	54	-22.15	A	1.00
* 12060.00	---	---	---	---	9.50	0.80	---	---	---	---	1.00
* 14472.00	---	---	---	---	0.00	0.67	---	---	---	---	1.00
16884.00	---	---	---	---	0.00	0.43	---	---	---	---	1.00
* 19296.00	---	---	---	---	0.00	1.96	---	---	---	---	1.00
21708.00	---	---	---	---	0.00	0.82	---	---	---	---	1.00
24120.00	---	---	---	---	0.00	2.91	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level=Reading + AF + Cable – Preamp + Filter – Dist, Margin = Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 3).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	13℃, 74%

CH1 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
* 2389.90	43.25	31.81	3.84	0.00	9.50	0.00	69.40	74	-4.60	P	1.00
* 2389.90	23.87	31.81	3.84	0.00	9.50	0.00	50.02	54	-3.98	A	1.00
2413.40	86.14	31.79	3.66	0.00	9.50	0.00	112.08	Fundamental Frequency		P	1.00
2413.40	73.52	31.79	3.66	0.00	9.50	0.00	99.46			A	1.00
* 4821.49	52.31	34.42	2.82	35.16	9.50	2.01	46.91	74	-27.09	P	1.00
* 4821.49	37.87	34.42	2.82	35.16	9.50	2.01	32.47	54	-21.53	A	1.00
7235.72	46.74	39.81	4.79	35.65	9.50	2.00	48.19	74	-25.81	P	1.00
7235.72	32.87	39.81	4.79	35.65	9.50	2.00	34.32	54	-19.68	A	1.00
9647.85	44.85	38.54	5.90	36.44	9.50	0.61	43.96	74	-30.04	P	1.00
9647.85	33.64	38.54	5.90	36.44	9.50	0.61	32.75	54	-21.25	A	1.00
* 12067.00	---	---	---	---	9.50	0.80	---	---	---	---	1.00
* 14480.40	---	---	---	---	0.00	0.68	---	---	---	---	1.00
16893.80	---	---	---	---	0.00	0.44	---	---	---	---	1.00
* 19307.20	---	---	---	---	0.00	1.97	---	---	---	---	1.00
21720.60	---	---	---	---	0.00	0.81	---	---	---	---	1.00
24134.00	---	---	---	---	0.00	2.89	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 3).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	13℃, 74%

CH6 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2436.89	74.25	31.76	3.48	0.00	9.50	0.00	99.99	Fundamental Frequency		P	1.00
2436.89	64.21	31.76	3.48	0.00	9.50	0.00	89.95			A	1.00
* 4874.68	41.25	34.77	2.73	35.20	9.50	1.80	35.85	74	-38.15	P	1.00
* 4874.68	32.49	34.77	2.73	35.20	9.50	1.80	27.09	54	-26.91	A	1.00
* 7311.77	40.85	39.78	4.82	35.64	9.50	2.00	42.31	74	-31.69	P	1.00
* 7311.77	33.24	39.78	4.82	35.64	9.50	2.00	34.70	54	-19.30	A	1.00
9747.61	42.87	38.53	5.90	36.60	9.50	0.55	41.75	74	-32.25	P	1.00
9747.61	32.50	38.53	5.90	36.60	9.50	0.55	31.38	54	-22.62	A	1.00
* 12184.45	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14621.34	---	---	---	---	0.00	0.60	---	---	---	---	1.00
17058.23	---	---	---	---	0.00	0.52	---	---	---	---	1.00
* 19495.12	---	---	---	---	0.00	2.19	---	---	---	---	1.00
21932.01	---	---	---	---	0.00	0.73	---	---	---	---	1.00
24368.90	---	---	---	---	0.00	2.51	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 3).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	13℃, 74%

CH6 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2436.83	86.32	31.76	3.48	0.00	9.50	0.00	112.06	Fundamental Frequency		P	1.00
2436.83	75.21	31.76	3.48	0.00	9.50	0.00	100.95			A	1.00
* 4876.33	53.47	34.78	2.72	35.20	9.50	1.79	48.07	74	-25.93	P	1.00
* 4876.33	37.25	34.78	2.72	35.20	9.50	1.79	31.85	54	-22.15	A	1.00
* 7310.97	42.74	39.78	4.82	35.64	9.50	2.00	44.20	74	-29.80	P	1.00
* 7310.97	30.88	39.78	4.82	35.64	9.50	2.00	32.34	54	-21.66	A	1.00
9747.69	42.57	38.53	5.90	36.60	9.50	0.55	41.45	74	-32.55	P	1.00
9747.69	32.74	38.53	5.90	36.60	9.50	0.55	31.62	54	-22.38	A	1.00
* 12184.15	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14620.98	---	---	---	---	0.00	0.60	---	---	---	---	1.00
17057.81	---	---	---	---	0.00	0.52	---	---	---	---	1.00
* 19494.64	---	---	---	---	0.00	2.19	---	---	---	---	1.00
21931.47	---	---	---	---	0.00	0.73	---	---	---	---	1.00
24368.30	---	---	---	---	0.00	2.51	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 3).
10 The test data marked in gray background means the EUT emission data is located in the margin uncertainty range of emission limits.

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	13℃, 74%

CH11 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2461.77	71.25	31.74	3.29	0.00	9.50	0.00	96.78	Fundamental Frequency		P	1.00
2461.77	63.25	31.74	3.29	0.00	9.50	0.00	88.78			A	1.00
* 2483.60	28.22	31.72	3.12	0.00	9.50	0.00	53.56	74	-20.44	P	1.00
* 2483.60	11.87	31.72	3.12	0.00	9.50	0.00	37.21	54	-16.79	A	1.00
* 4925.33	45.25	35.11	2.63	35.24	9.50	1.60	39.85	74	-34.15	P	1.00
* 4925.33	32.47	35.11	2.63	35.24	9.50	1.60	27.07	54	-26.93	A	1.00
* 7386.33	42.36	39.75	4.85	35.62	9.50	2.00	43.84	74	-30.16	P	1.00
* 7386.33	31.57	39.75	4.85	35.62	9.50	2.00	33.05	54	-20.95	A	1.00
9847.68	46.54	38.52	5.90	36.76	9.50	0.49	45.19	74	-28.81	P	1.00
9847.68	32.47	38.52	5.90	36.76	9.50	0.49	31.12	54	-22.88	A	1.00
* 12308.85	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14770.62	---	---	---	---	0.00	0.48	---	---	---	---	1.00
17232.39	---	---	---	---	0.00	0.59	---	---	---	---	1.00
* 19694.16	---	---	---	---	0.00	2.39	---	---	---	---	1.00
* 22155.93	---	---	---	---	0.00	0.70	---	---	---	---	1.00
24617.70	---	---	---	---	0.00	2.14	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 3).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	13℃, 74%

CH11 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2461.88	83.25	31.74	3.29	0.00	9.50	0.00	108.78	Fundamental Frequency		P	1.00
2461.88	71.25	31.74	3.29	0.00	9.50	0.00	96.78			A	1.00
* 2483.60	44.36	31.72	3.12	0.00	9.50	0.00	69.70	74	-4.30	P	1.00
* 2483.60	25.36	31.72	3.12	0.00	9.50	0.00	50.70	54	-3.30	A	1.00
* 4925.40	53.24	35.11	2.63	35.24	9.50	1.60	47.84	74	-26.16	P	1.00
* 4925.40	38.98	35.11	2.63	35.24	9.50	1.60	33.58	54	-20.42	A	1.00
* 7386.05	43.25	39.75	4.85	35.62	9.50	2.00	44.73	74	-29.27	P	1.00
* 7386.05	33.24	39.75	4.85	35.62	9.50	2.00	34.72	54	-19.28	A	1.00
9847.81	43.74	38.52	5.90	36.76	9.50	0.49	42.39	74	-31.61	P	1.00
9847.81	31.25	38.52	5.90	36.76	9.50	0.49	29.90	54	-24.10	A	1.00
* 12309.40	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14771.28	---	---	---	---	0.00	0.48	---	---	---	---	1.00
17233.16	---	---	---	---	0.00	0.59	---	---	---	---	1.00
* 19695.04	---	---	---	---	0.00	2.40	---	---	---	---	1.00
* 22156.92	---	---	---	---	0.00	0.70	---	---	---	---	1.00
24618.80	---	---	---	---	0.00	2.13	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 3).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
* 2389.90	19.54	31.81	3.84	0.00	9.50	0.00	45.69	74	-28.31	P	1.00
* 2389.90	13.43	31.81	3.84	0.00	9.50	0.00	39.58	54	-14.42	A	1.00
2412.10	79.84	31.79	3.67	0.00	9.50	0.00	105.80	Fundamental Frequency		P	1.00
2412.10	69.57	31.79	3.67	0.00	9.50	0.00	95.53			A	1.00
* 4823.72	50.74	34.44	2.82	35.16	9.50	2.01	45.34	74	-28.66	P	1.00
* 4823.72	39.41	34.44	2.82	35.16	9.50	2.01	34.01	54	-19.99	A	1.00
7235.72	44.57	39.81	4.79	35.65	9.50	2.00	46.02	74	-27.98	P	1.00
7235.72	34.74	39.81	4.79	35.65	9.50	2.00	36.19	54	-17.81	A	1.00
9647.71	44.63	38.54	5.90	36.44	9.50	0.61	43.74	74	-30.26	P	1.00
9647.71	33.47	38.54	5.90	36.44	9.50	0.61	32.58	54	-21.42	A	1.00
* 12060.50	---	---	---	---	9.50	0.80	---	---	---	---	1.00
* 14472.60	---	---	---	---	0.00	0.67	---	---	---	---	1.00
16884.70	---	---	---	---	0.00	0.43	---	---	---	---	1.00
* 19296.80	---	---	---	---	0.00	1.96	---	---	---	---	1.00
21708.90	---	---	---	---	0.00	0.82	---	---	---	---	1.00
24121.00	---	---	---	---	0.00	2.91	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level=Reading + AF + Cable – Preamp + Filter – Dist, Margin = Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 4).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH1 TX				Measurement Distance at 1m Vertical polarity							
	Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
*	2389.90	41.35	31.81	3.84	0.00	9.50	0.00	67.50	74	-6.50	P	1.00
*	2389.90	26.54	31.81	3.84	0.00	9.50	0.00	52.69	54	-1.31	A	1.00
	2412.10	91.24	31.79	3.67	0.00	9.50	0.00	117.20	Fundamental Frequency		P	1.00
	2412.10	83.41	31.79	3.67	0.00	9.50	0.00	109.37			A	1.00
*	4823.88	60.35	34.44	2.82	35.16	9.50	2.00	54.95	74	-19.05	P	1.00
*	4823.88	46.24	34.44	2.82	35.16	9.50	2.00	40.84	54	-13.16	A	1.00
	7235.72	49.81	39.81	4.79	35.65	9.50	2.00	51.26	74	-22.74	P	1.00
	7235.72	41.25	39.81	4.79	35.65	9.50	2.00	42.70	54	-11.30	A	1.00
	9647.71	48.33	38.54	5.90	36.44	9.50	0.61	47.44	74	-26.56	P	1.00
	9647.71	42.45	38.54	5.90	36.44	9.50	0.61	41.56	54	-12.44	A	1.00
*	12060.50	---	---	---	---	9.50	0.80	---	---	---	---	1.00
*	14472.60	---	---	---	---	0.00	0.67	---	---	---	---	1.00
	16884.70	---	---	---	---	0.00	0.43	---	---	---	---	1.00
*	19296.80	---	---	---	---	0.00	1.96	---	---	---	---	1.00
	21708.90	---	---	---	---	0.00	0.82	---	---	---	---	1.00
	24121.00	---	---	---	---	0.00	2.91	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 4).
10. The test data marked in gray background means the EUT emission data is located in the margin uncertainty range of emission limits.

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2436.11	82.14	31.76	3.49	0.00	9.50	0.00	107.89	Fundamental Frequency		P	1.00
2436.11	73.25	31.76	3.49	0.00	9.50	0.00	99.00			A	1.00
* 4874.05	53.14	34.77	2.73	35.20	9.50	1.80	47.74	74	-26.26	P	1.00
* 4874.05	46.24	34.77	2.73	35.20	9.50	1.80	40.84	54	-13.16	A	1.00
* 7312.19	53.24	39.78	4.82	35.64	9.50	2.00	54.70	74	-19.30	P	1.00
* 7312.19	42.63	39.78	4.82	35.64	9.50	2.00	44.09	54	-9.91	A	1.00
9747.76	52.43	38.53	5.90	36.60	9.50	0.55	51.31	74	-22.69	P	1.00
9747.76	42.15	38.53	5.90	36.60	9.50	0.55	41.03	54	-12.97	A	1.00
* 12180.55	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14616.66	---	---	---	---	0.00	0.61	---	---	---	---	1.00
17052.77	---	---	---	---	0.00	0.52	---	---	---	---	1.00
* 19488.88	---	---	---	---	0.00	2.19	---	---	---	---	1.00
21924.99	---	---	---	---	0.00	0.73	---	---	---	---	1.00
24361.10	---	---	---	---	0.00	2.52	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 4).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH6 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2434.50	92.34	31.77	3.50	0.00	9.50	0.00	118.10	Fundamental Frequency		P	1.00
2434.50	82.34	31.77	3.50	0.00	9.50	0.00	108.10			A	1.00
* 4876.00	58.24	34.78	2.72	35.20	9.50	1.80	52.84	74	-21.16	P	1.00
* 4876.00	46.74	34.78	2.72	35.20	9.50	1.80	41.34	54	-12.66	A	1.00
* 7311.30	51.36	39.78	4.82	35.64	9.50	2.00	52.82	74	-21.18	P	1.00
* 7311.30	44.25	39.78	4.82	35.64	9.50	2.00	45.71	54	-8.29	A	1.00
9748.06	53.24	38.53	5.90	36.60	9.50	0.55	52.12	74	-21.88	P	1.00
9748.06	46.27	38.53	5.90	36.60	9.50	0.55	45.15	54	-8.85	A	1.00
* 12172.50	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14607.00	---	---	---	---	0.00	0.61	---	---	---	---	1.00
17041.50	---	---	---	---	0.00	0.52	---	---	---	---	1.00
* 19476.00	---	---	---	---	0.00	2.17	---	---	---	---	1.00
21910.50	---	---	---	---	0.00	0.74	---	---	---	---	1.00
24345.00	---	---	---	---	0.00	2.55	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 4).
10 The test data marked in gray background means the EUT emission data is located in the margin uncertainty range of emission limits.

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2461.77	76.34	31.74	3.29	0.00	9.50	0.00	101.87	Fundamental Frequency		P	1.00
2461.77	66.14	31.74	3.29	0.00	9.50	0.00	91.67			A	1.00
2448.20	24.36	31.75	3.39	0.00	9.50	0.00	50.01	74	-23.99	P	1.00
2448.20	13.24	31.75	3.39	0.00	9.50	0.00	38.89	54	-15.11	A	1.00
* 4923.88	54.32	35.10	2.64	35.24	9.50	1.60	48.92	74	-25.08	P	1.00
* 4923.88	39.64	35.10	2.64	35.24	9.50	1.60	34.24	54	-19.76	A	1.00
* 7386.33	46.27	39.75	4.85	35.62	9.50	2.00	47.75	74	-26.25	P	1.00
* 7386.33	35.27	39.75	4.85	35.62	9.50	2.00	36.75	54	-17.25	A	1.00
9847.68	46.21	38.52	5.90	36.76	9.50	0.49	44.86	74	-29.14	P	1.00
9847.68	33.24	38.52	5.90	36.76	9.50	0.49	31.89	54	-22.11	A	1.00
* 12308.85	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14770.62	---	---	---	---	0.00	0.48	---	---	---	---	1.00
17232.39	---	---	---	---	0.00	0.59	---	---	---	---	1.00
* 19694.16	---	---	---	---	0.00	2.39	---	---	---	---	1.00
* 22155.93	---	---	---	---	0.00	0.70	---	---	---	---	1.00
24617.70	---	---	---	---	0.00	2.14	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 4).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	18.4℃, 61%

CH11 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2461.66	88.64	31.74	3.29	0.00	9.50	0.00	114.17	Fundamental Frequency		P	1.00
2461.66	79.32	31.74	3.29	0.00	9.50	0.00	104.85			A	1.00
* 2488.20	39.24	31.71	3.09	0.00	9.50	0.00	64.54	74	-9.46	P	1.00
* 2488.20	26.41	31.71	3.09	0.00	9.50	0.00	51.71	54	-2.29	A	1.00
* 4923.88	53.24	35.10	2.64	35.24	9.50	1.60	47.84	74	-26.16	P	1.00
* 4923.88	46.72	35.10	2.64	35.24	9.50	1.60	41.32	54	-12.68	A	1.00
* 7385.38	47.24	39.75	4.85	35.62	9.50	2.00	48.72	74	-25.28	P	1.00
* 7385.38	33.54	39.75	4.85	35.62	9.50	2.00	35.02	54	-18.98	A	1.00
9847.81	43.25	38.52	5.90	36.76	9.50	0.49	41.90	74	-32.10	P	1.00
9847.81	32.55	38.52	5.90	36.76	9.50	0.49	31.20	54	-22.80	A	1.00
* 12308.30	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14769.96	---	---	---	---	0.00	0.48	---	---	---	---	1.00
17231.62	---	---	---	---	0.00	0.59	---	---	---	---	1.00
* 19693.28	---	---	---	---	0.00	2.39	---	---	---	---	1.00
* 22154.94	---	---	---	---	0.00	0.70	---	---	---	---	1.00
24616.60	---	---	---	---	0.00	2.14	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode at 11Mbps (Antenna 4).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	13℃, 74%

CH1 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
* 2389.90	34.24	31.81	3.84	0.00	9.50	0.00	60.39	74	-13.61	P	1.00
* 2389.90	14.53	31.81	3.84	0.00	9.50	0.00	40.68	54	-13.32	A	1.00
2412.00	76.35	31.79	3.67	0.00	9.50	0.00	102.31	Fundamental Frequency		P	1.00
2412.00	63.54	31.79	3.67	0.00	9.50	0.00	89.50			A	1.00
* 4823.86	42.34	34.44	2.82	35.16	9.50	2.00	36.94	74	-37.06	P	1.00
* 4823.86	33.74	34.44	2.82	35.16	9.50	2.00	28.34	54	-25.66	A	1.00
7236.00	42.34	39.81	4.79	35.65	9.50	2.00	43.79	74	-30.21	P	1.00
7236.00	32.45	39.81	4.79	35.65	9.50	2.00	33.90	54	-20.10	A	1.00
9648.00	43.87	38.54	5.90	36.44	9.50	0.61	42.98	74	-31.02	P	1.00
9648.00	33.25	38.54	5.90	36.44	9.50	0.61	32.36	54	-21.64	A	1.00
* 12060.00	---	---	---	---	9.50	0.80	---	---	---	---	1.00
* 14472.00	---	---	---	---	0.00	0.67	---	---	---	---	1.00
16884.00	---	---	---	---	0.00	0.43	---	---	---	---	1.00
* 19296.00	---	---	---	---	0.00	1.96	---	---	---	---	1.00
21708.00	---	---	---	---	0.00	0.82	---	---	---	---	1.00
24120.00	---	---	---	---	0.00	2.91	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level=Reading + AF + Cable – Preamp + Filter – Dist, Margin = Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 4).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	13℃, 74%

CH1 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
* 2389.90	44.25	31.81	3.84	0.00	9.50	0.00	70.40	74	-3.60	P	1.00
* 2389.90	24.35	31.81	3.84	0.00	9.50	0.00	50.50	54	-3.50	A	1.00
2413.40	87.23	31.79	3.66	0.00	9.50	0.00	113.17	Fundamental Frequency		P	1.00
2413.40	74.36	31.79	3.66	0.00	9.50	0.00	100.30			A	1.00
* 4821.49	53.24	34.42	2.82	35.16	9.50	2.01	47.84	74	-26.16	P	1.00
* 4821.49	38.54	34.42	2.82	35.16	9.50	2.01	33.14	54	-20.86	A	1.00
7235.72	47.25	39.81	4.79	35.65	9.50	2.00	48.70	74	-25.30	P	1.00
7235.72	33.54	39.81	4.79	35.65	9.50	2.00	34.99	54	-19.01	A	1.00
9647.85	45.63	38.54	5.90	36.44	9.50	0.61	44.74	74	-29.26	P	1.00
9647.85	33.87	38.54	5.90	36.44	9.50	0.61	32.98	54	-21.02	A	1.00
* 12067.00	---	---	---	---	9.50	0.80	---	---	---	---	1.00
* 14480.40	---	---	---	---	0.00	0.68	---	---	---	---	1.00
16893.80	---	---	---	---	0.00	0.44	---	---	---	---	1.00
* 19307.20	---	---	---	---	0.00	1.97	---	---	---	---	1.00
21720.60	---	---	---	---	0.00	0.81	---	---	---	---	1.00
24134.00	---	---	---	---	0.00	2.89	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 4).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	13℃, 74%

CH6 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2436.89	75.63	31.76	3.48	0.00	9.50	0.00	101.37	Fundamental Frequency		P	1.00
2436.89	65.24	31.76	3.48	0.00	9.50	0.00	90.98			A	1.00
* 4874.68	42.35	34.77	2.73	35.20	9.50	1.80	36.95	74	-37.05	P	1.00
* 4874.68	32.87	34.77	2.73	35.20	9.50	1.80	27.47	54	-26.53	A	1.00
* 7311.77	41.36	39.78	4.82	35.64	9.50	2.00	42.82	74	-31.18	P	1.00
* 7311.77	33.87	39.78	4.82	35.64	9.50	2.00	35.33	54	-18.67	A	1.00
9747.61	43.57	38.53	5.90	36.60	9.50	0.55	42.45	74	-31.55	P	1.00
9747.61	33.53	38.53	5.90	36.60	9.50	0.55	32.41	54	-21.59	A	1.00
* 12184.45	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14621.34	---	---	---	---	0.00	0.60	---	---	---	---	1.00
17058.23	---	---	---	---	0.00	0.52	---	---	---	---	1.00
* 19495.12	---	---	---	---	0.00	2.19	---	---	---	---	1.00
21932.01	---	---	---	---	0.00	0.73	---	---	---	---	1.00
24368.90	---	---	---	---	0.00	2.51	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 4).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	13℃, 74%

CH6 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2436.83	87.52	31.76	3.48	0.00	9.50	0.00	113.26	Fundamental Frequency		P	1.00
2436.83	75.21	31.76	3.48	0.00	9.50	0.00	100.95			A	1.00
* 4876.33	53.21	34.78	2.72	35.20	9.50	1.79	47.81	74	-26.19	P	1.00
* 4876.33	34.25	34.78	2.72	35.20	9.50	1.79	28.85	54	-25.15	A	1.00
* 7310.97	42.58	39.78	4.82	35.64	9.50	2.00	44.04	74	-29.96	P	1.00
* 7310.97	31.25	39.78	4.82	35.64	9.50	2.00	32.71	54	-21.29	A	1.00
9747.69	43.64	38.53	5.90	36.60	9.50	0.55	42.52	74	-31.48	P	1.00
9747.69	33.74	38.53	5.90	36.60	9.50	0.55	32.62	54	-21.38	A	1.00
* 12184.15	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14620.98	---	---	---	---	0.00	0.60	---	---	---	---	1.00
17057.81	---	---	---	---	0.00	0.52	---	---	---	---	1.00
* 19494.64	---	---	---	---	0.00	2.19	---	---	---	---	1.00
21931.47	---	---	---	---	0.00	0.73	---	---	---	---	1.00
24368.30	---	---	---	---	0.00	2.51	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 4).
10 The test data marked in gray background means the EUT emission data is located in the margin uncertainty range of emission limits.

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	13℃, 47%

CH11 TX				Measurement Distance at 1m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2461.77	72.54	31.74	3.29	0.00	9.50	0.00	98.07	Fundamental Frequency		P	1.00
2461.77	64.35	31.74	3.29	0.00	9.50	0.00	89.88			A	1.00
* 2483.60	28.98	31.72	3.12	0.00	9.50	0.00	54.32	74	-19.68	P	1.00
* 2483.60	12.34	31.72	3.12	0.00	9.50	0.00	37.68	54	-16.32	A	1.00
* 4925.33	46.35	35.11	2.63	35.24	9.50	1.60	40.95	74	-33.05	P	1.00
* 4925.33	33.47	35.11	2.63	35.24	9.50	1.60	28.07	54	-25.93	A	1.00
* 7386.33	43.54	39.75	4.85	35.62	9.50	2.00	45.02	74	-28.98	P	1.00
* 7386.33	32.61	39.75	4.85	35.62	9.50	2.00	34.09	54	-19.91	A	1.00
9847.68	46.51	38.52	5.90	36.76	9.50	0.49	45.16	74	-28.84	P	1.00
9847.68	33.58	38.52	5.90	36.76	9.50	0.49	32.23	54	-21.77	A	1.00
* 12308.85	---	---	---	---	9.50	0.80	---	---	---	---	1.00
14770.62	---	---	---	---	0.00	0.48	---	---	---	---	1.00
17232.39	---	---	---	---	0.00	0.59	---	---	---	---	1.00
* 19694.16	---	---	---	---	0.00	2.39	---	---	---	---	1.00
* 22155.93	---	---	---	---	0.00	0.70	---	---	---	---	1.00
24617.70	---	---	---	---	0.00	2.14	---	---	---	---	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 4).

Test Requirement: 15.205
The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

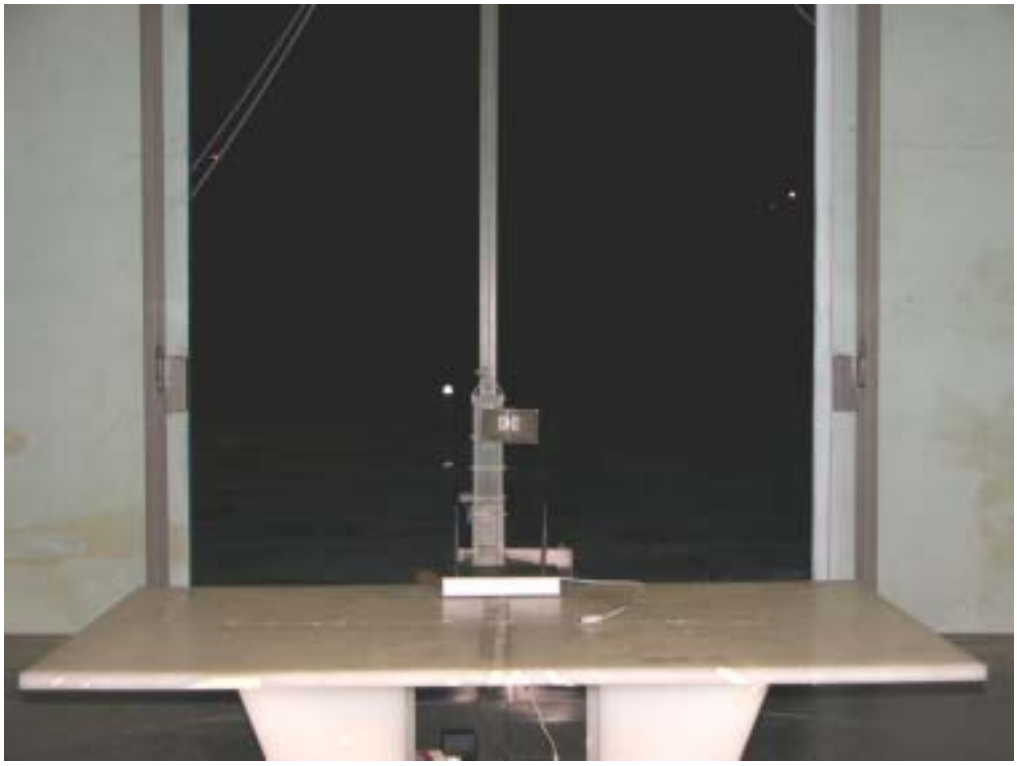
Company	Z-Com, Inc.	Test Date :	2004/4/10
Product Name	802.11g SMB Wireless Access Point	Test By:	Nicky Liu
Model Name	XG-3020	TEMP&Humidity :	13℃, 47%

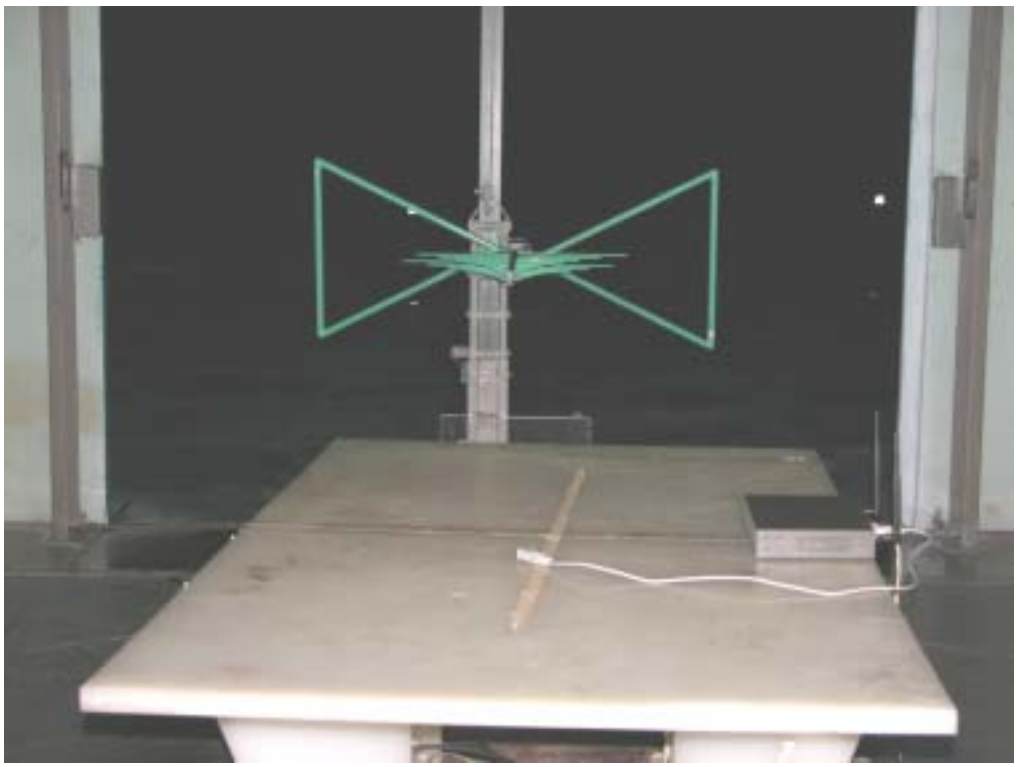
CH11 TX				Measurement Distance at 1m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2461.88	83.54	31.74	3.29	0.00	9.50	0.00	109.07	Fundamental Frequency		P	1.00
2461.88	70.14	31.74	3.29	0.00	9.50	0.00	95.67			A	1.00
* 2483.60	44.87	31.72	3.12	0.00	9.50	0.00	70.21	74	-3.79	P	1.00
* 2483.60	24.16	31.72	3.12	0.00	9.50	0.00	49.50	54	-4.50	A	1.00
* 4925.40	52.37	35.11	2.63	35.24	9.50	1.60	46.97	74	-27.03	P	1.00
* 4925.40	39.87	35.11	2.63	35.24	9.50	1.60	34.47	54	-19.53	A	1.00
* 7386.05	43.57	39.75	4.85	35.62	9.50	2.00	45.05	74	-28.95	P	1.00
* 7386.05	33.77	39.75	4.85	35.62	9.50	2.00	35.25	54	-18.75	A	1.00
9847.81	743.53	38.52	5.90	36.76	9.50	0.49	742.18	74	668.18	P	1.00
9847.81	32.71	38.52	5.90	36.76	9.50	0.49	31.36	54	-22.64	A	1.00
* 12309.40	------	------	------	------	9.50	0.80	------	------	------	------	1.00
14771.28	------	------	------	------	0.00	0.48	------	------	------	------	1.00
17233.16	------	------	------	------	0.00	0.59	------	------	------	------	1.00
* 19695.04	------	------	------	------	0.00	2.40	------	------	------	------	1.00
* 22156.92	------	------	------	------	0.00	0.70	------	------	------	------	1.00
24618.80	------	------	------	------	0.00	2.13	------	------	------	------	1.00

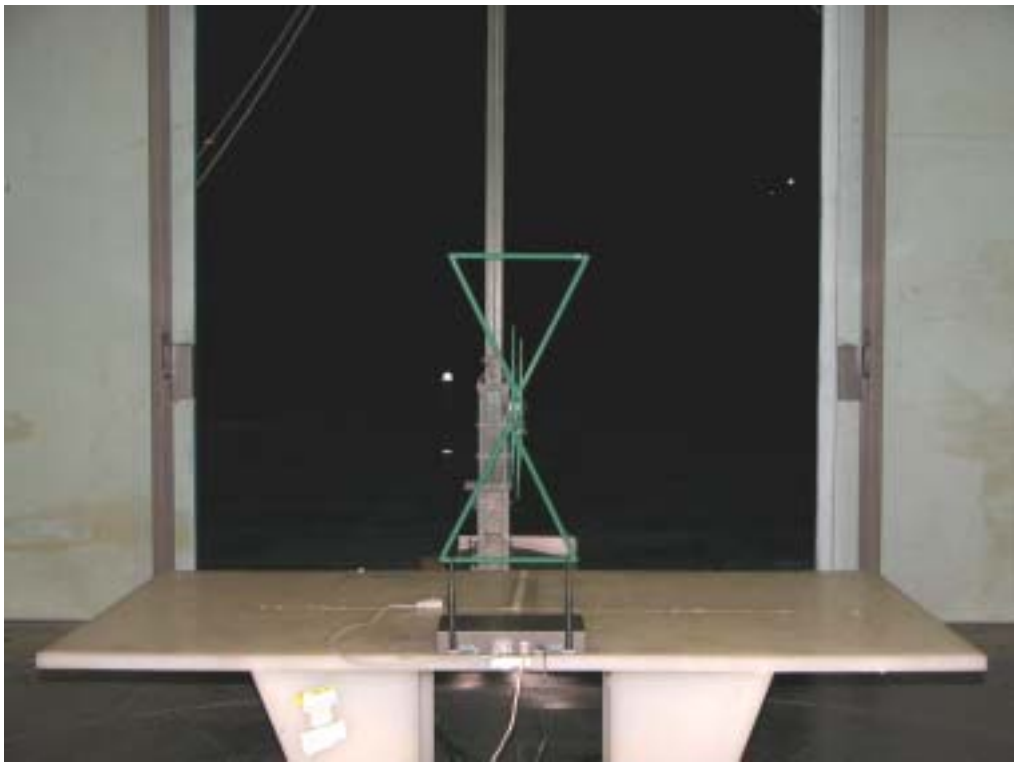
Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode at 6Mbps (Antenna 4).

3.7 Photos of Open Site

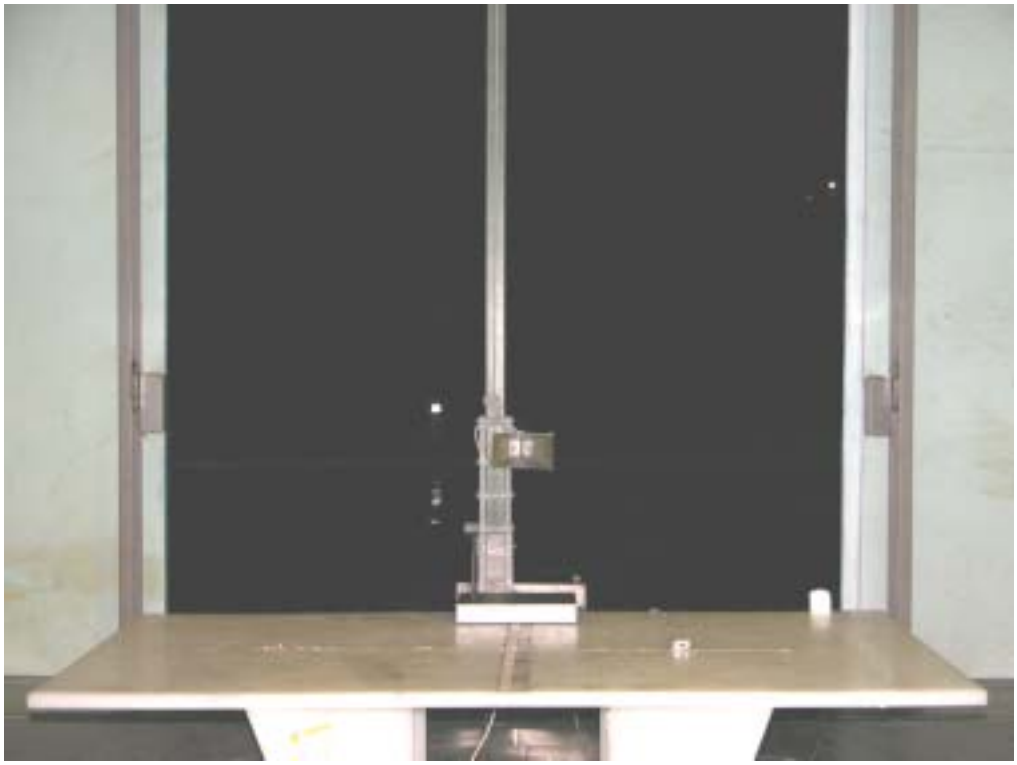
Antenna 1

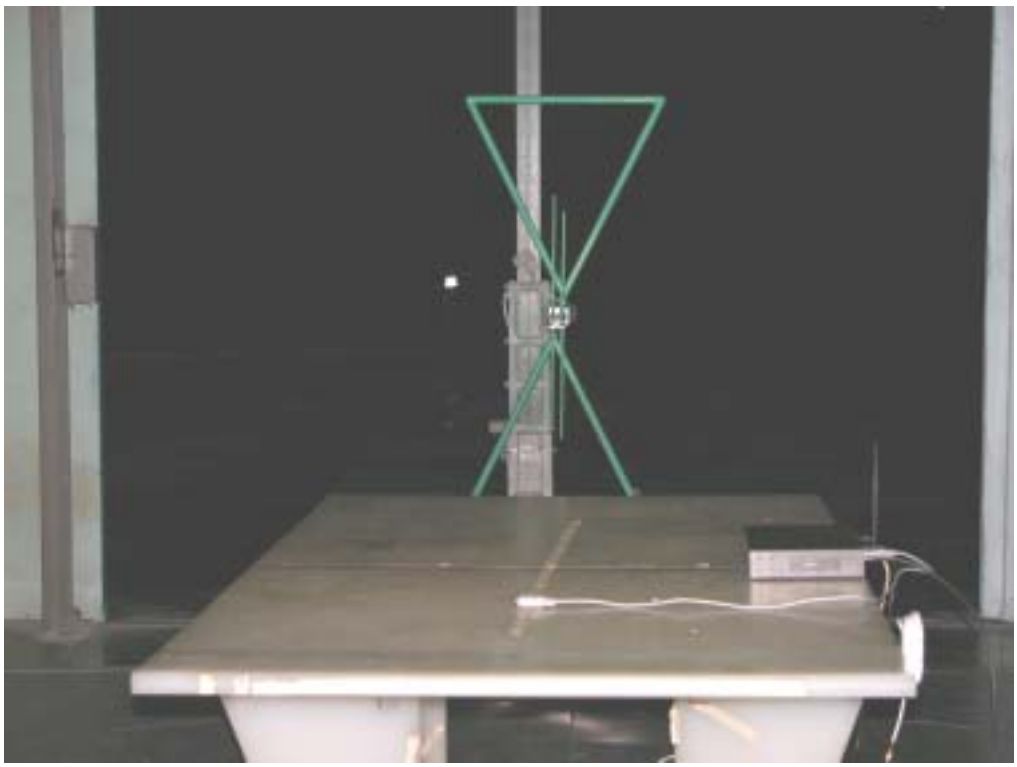


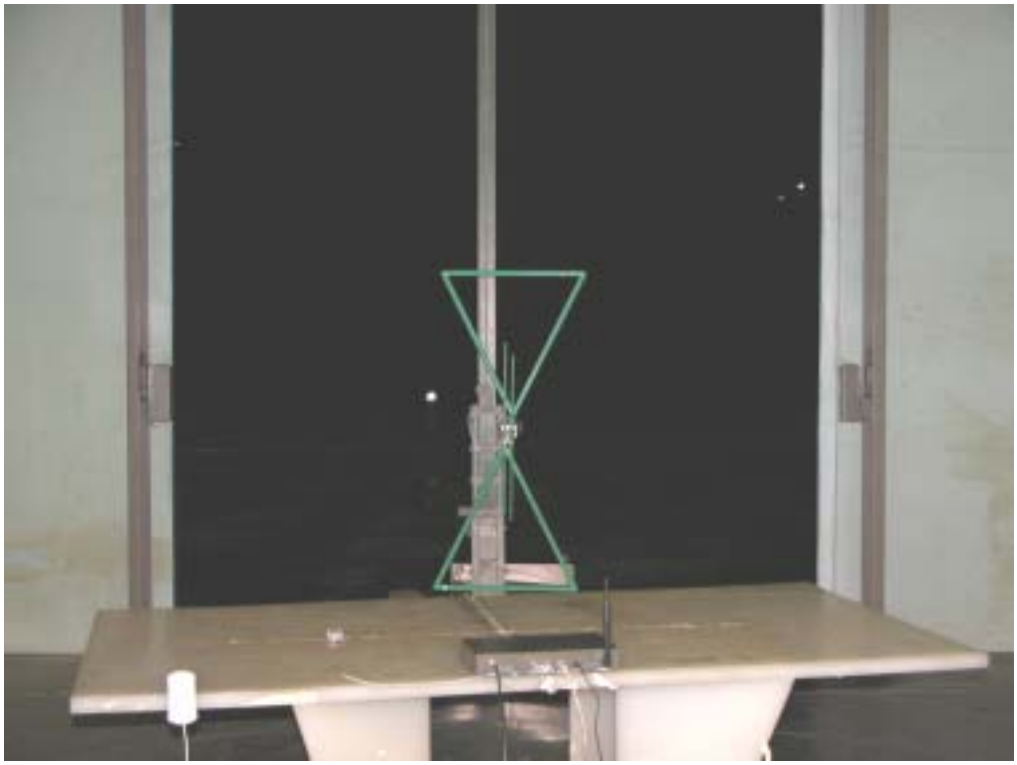




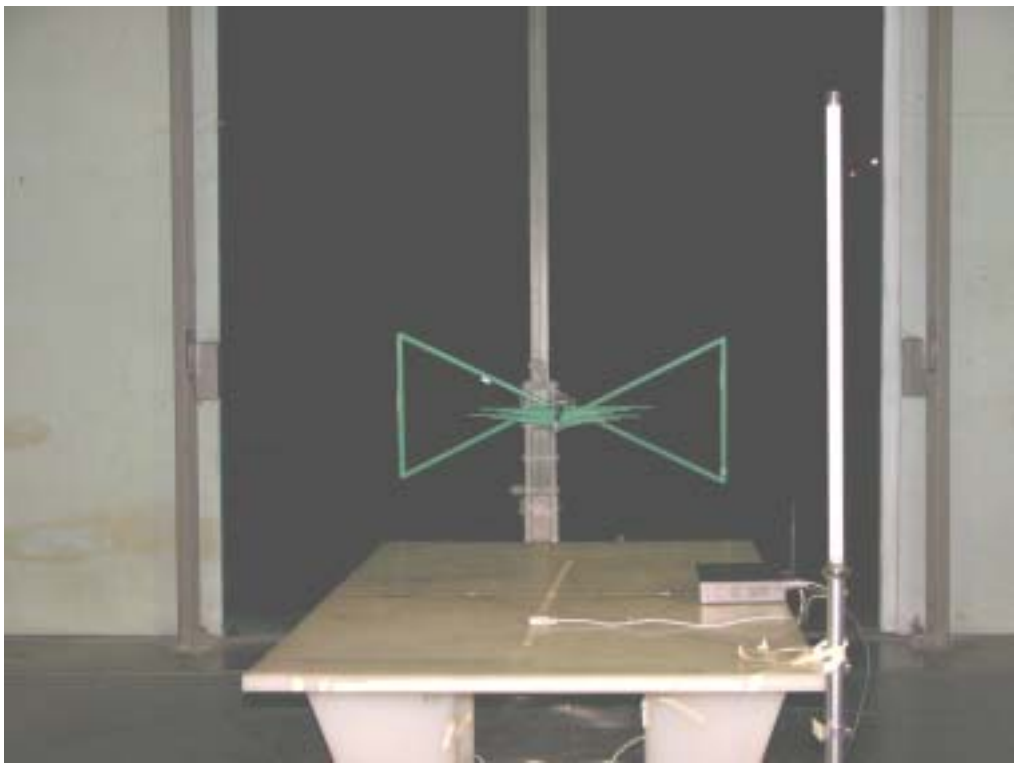
Antenna 2

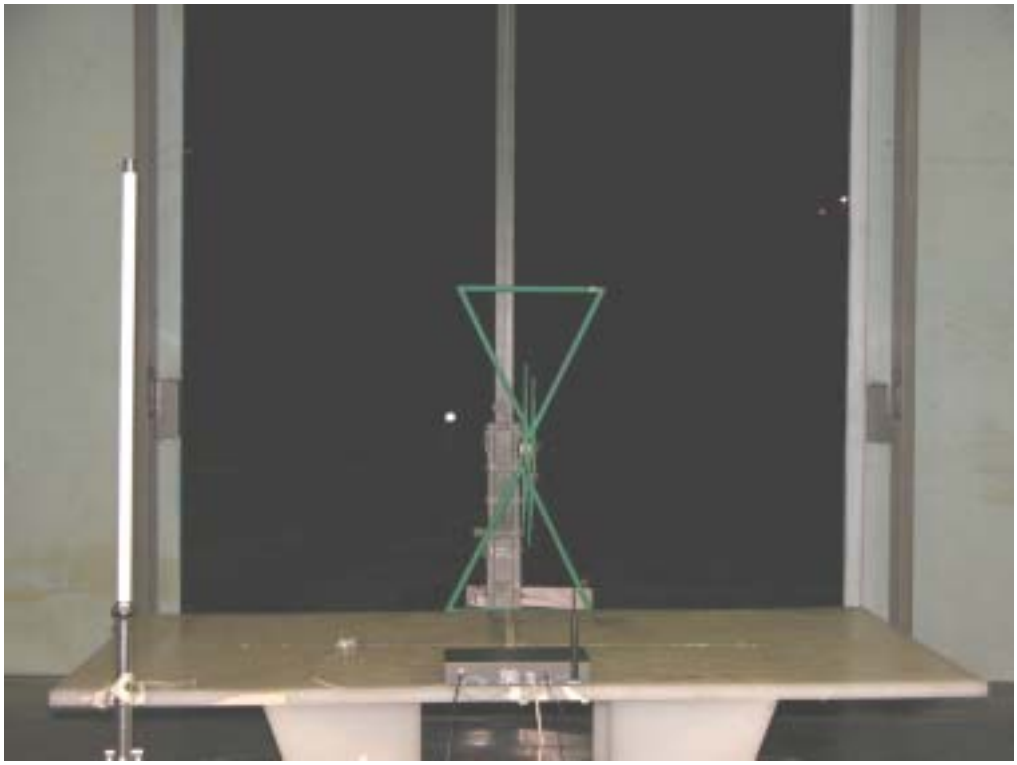




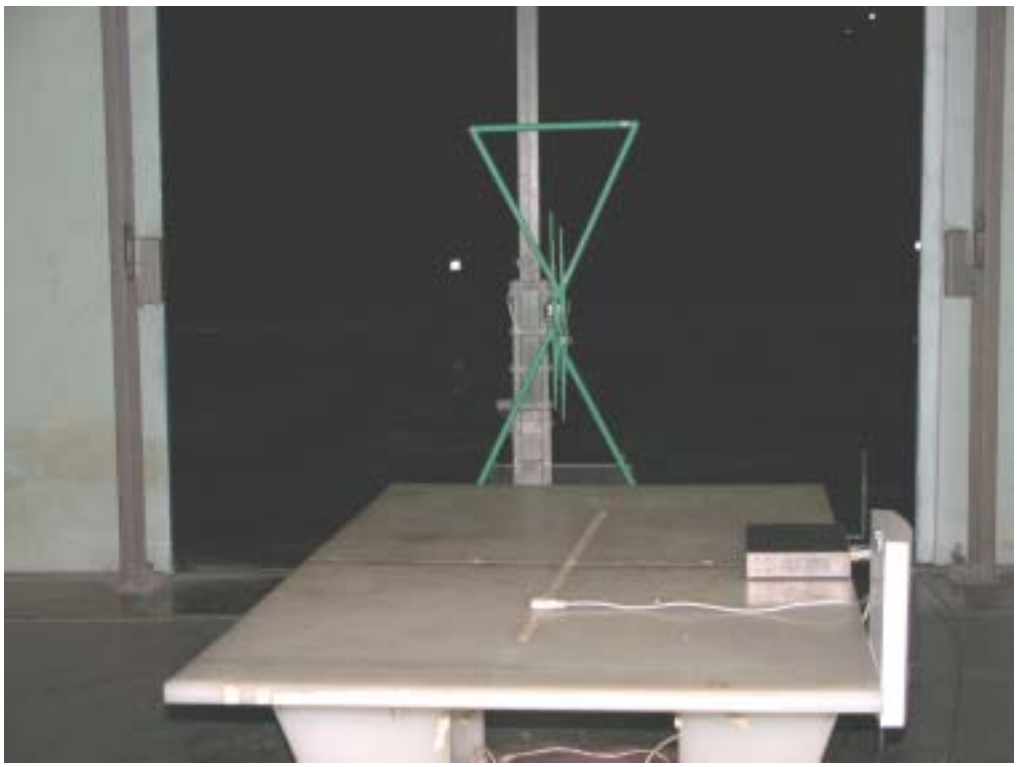


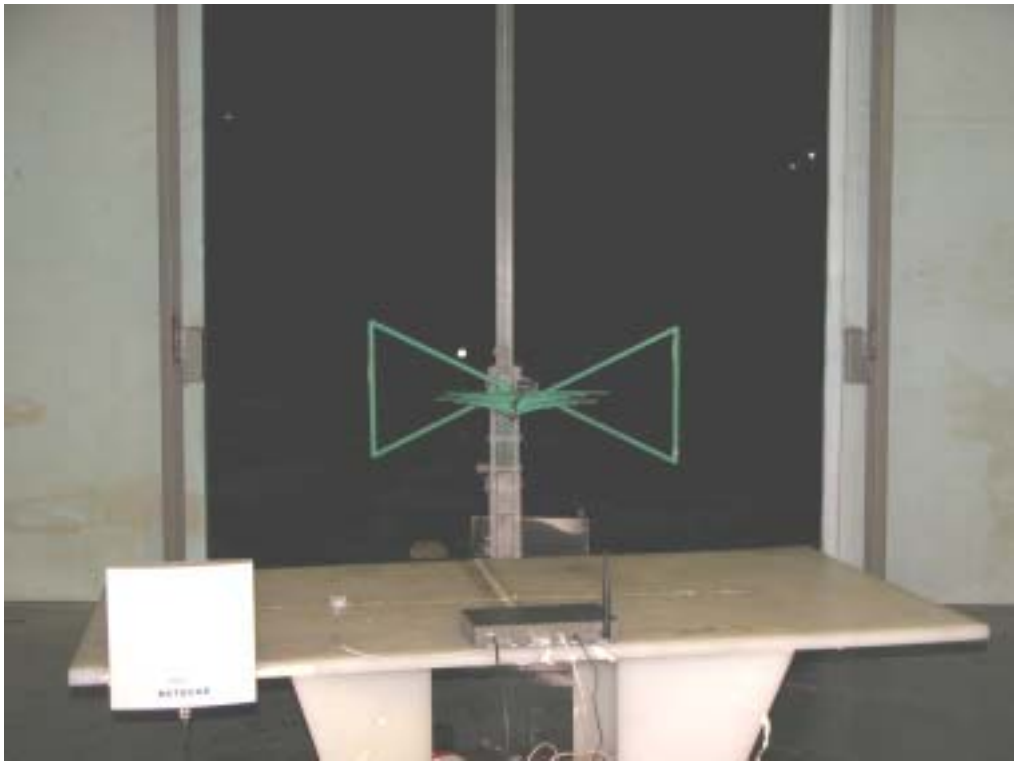
Antenna 3





Antenna 4





4. 6dB BANDWIDTH MEASUREMENT

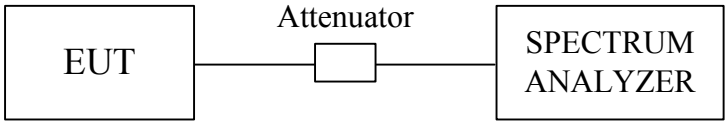
4.1 Test Equipments

Description & Manufacturer	Model No.	Serial No.	Date Of Calibration
ROHDE & SCHWARZ SPECTRUM ANALYZER	FSEK30	835253/002	JUN. 17, 2003
HP ATTENUATOR	8496B	3247A18505	Cal. on use
HP PLOTTER	7750A	725A 852141	N/A

Note：

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.2 Test Setup



4.3 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is >500KHz

4.4 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100 KHz RBW and 1000 KHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

4.5 Uncertainty of Conducted Emission

The uncertainty of conducted emission is ± 200KHz.

4.6 Test Results

Input Power (System)	12VDC (Form Power Adapter)	Environmental Conditions	33.4℃, 43%RH,
Tested By	Nicky Liu		

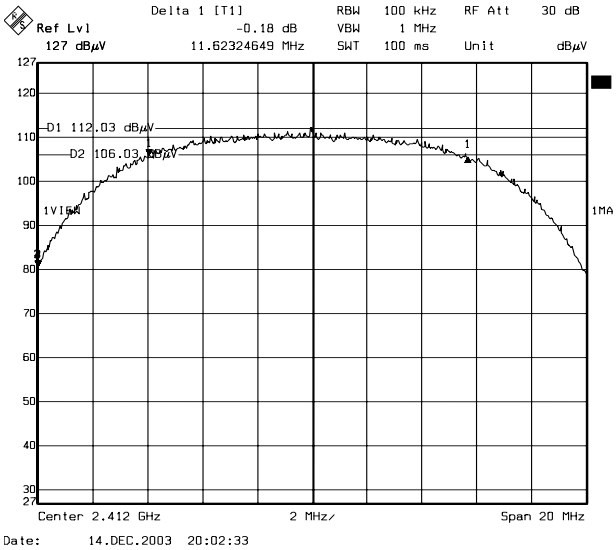
Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	11.62	0.5	PASS
6	2437	11.92	0.5	PASS
11	2462	11.66	0.5	PASS

Note: 1. For 802.11b Mode

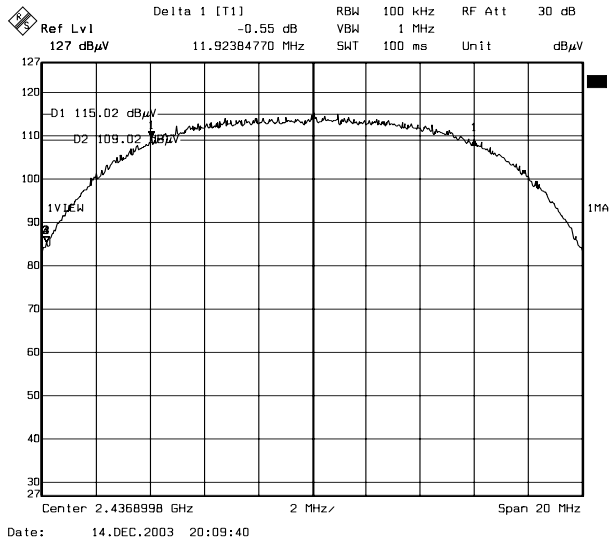
Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	16.43	0.5	PASS
6	2437	16.41	0.5	PASS
11	2462	16.43	0.5	PASS

Note: 1. For 802.11g Mode

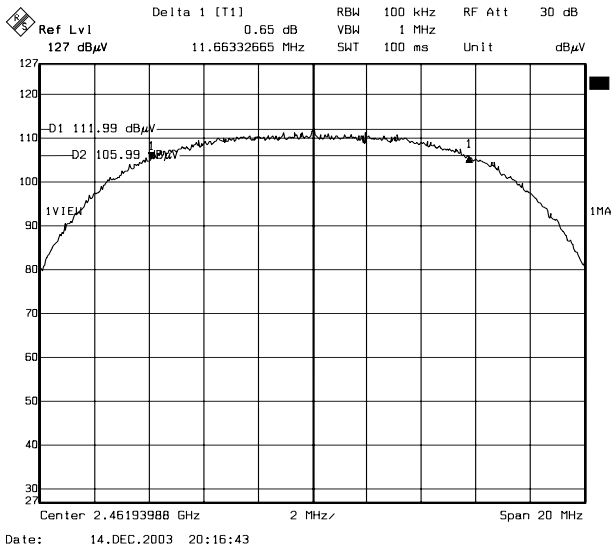
4.7 Photo of 6db Bandwidth Measurement



Channel 1

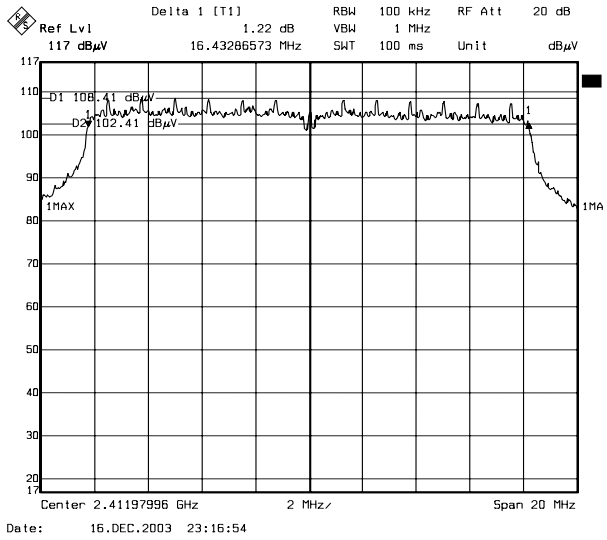


Channel 6

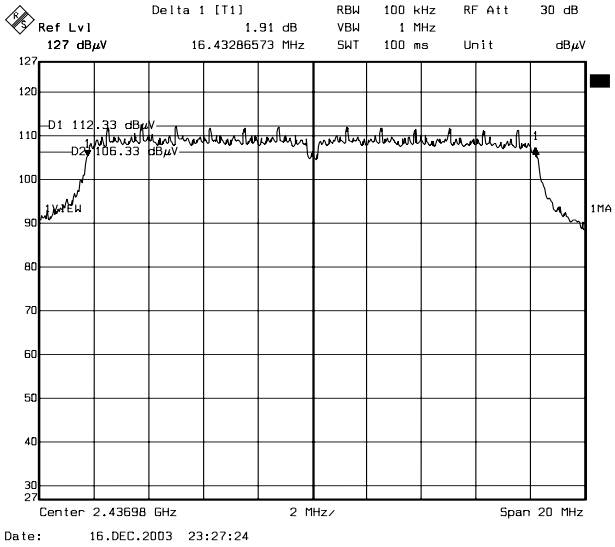


Channel 11

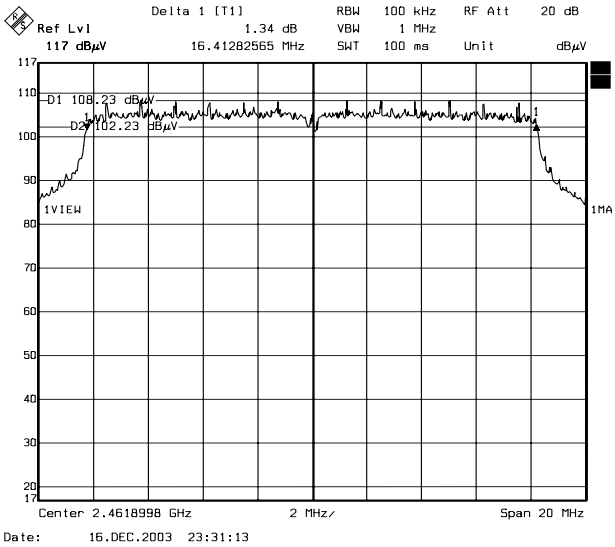
Note:For 802.11b Mode



Channel 1



Channel 6



Channel 11

Note:For 802.11g Mode

5. MAXIMUM PEAK OUTPUT POWER

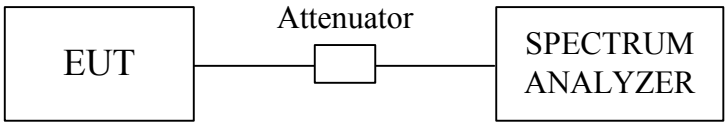
5.1 Test Equipments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration
ROHDE & SCHWARZ SPECTRUM ANALYZER	FSEK30	835253/002	JUN. 17, 2003
HP ATTENUATOR	8496B	3247A18505	Cal. on use
HP PLOTTER	7750A	725A 852141	N/A
GIGASTRONICS POWER METER	8542	1828329	SEPT. 19, 2003

Note：

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

5.2 Test Setup



5.3 Limits of Maximum Peak Output Power

The Maximum Peak Output Power Measurement is 30dBm.

5.4 Test Procedure

The RF power output was measured with a Power meter connected to the RF Antenna connector (conducted measurement) while EUT was operating in transmit mode at the appropriate center frequency.

The output power can be controlled ART test software. Different channel has different rated RF power. For channel 1 in 802.11g mode, the parameter of OUTPUT POWER set in ART test software during test is 15.
For channel 6 in 802.11g mode the parameter of OUTPUT POWER set in ART test software during test is 20.

For channel 11 in 802.11g mode the parameter of OUTPUT POWER set in ART test software during test is 15.
For channel 1 in 802.11b mode the parameter of OUTPUT POWER set in ART test software during test is 15.
For channel 6 in 802.11b mode the parameter of OUTPUT POWER set in ART test software during test is 20.
For channel 11 in 802.11b mode the parameter of OUTPUT POWER set in ART test software during test is 15.

5.5 Uncertainty of Conducted Emission

The uncertainty of conducted emission is ± 1.82dB.

5.6 Test Results

Channel	Channel Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass / Fail
1	2412	16.22	30	PASS
6	2437	17.92	30	PASS
11	2462	15.49	30	PASS

Note : 1. For 802.11b Mode (Antenna 1)
2. At finial test to get the worst-case emission at 11Mbps.
3. The result basic equation calculation as follow :
Peak Power Output = Peak Power Reading + Cable loss + Attenuator

Channel	Channel Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass / Fail
1	2412	14.88	30	PASS
6	2437	18.38	30	PASS
11	2462	14.23	30	PASS

Note : 1. For 802.11g Mode (Antenna 1)
2. At finial test to get the worst-case emission at 6Mbps.
3. The result basic equation calculation as follow :
Peak Power Output = Peak Power Reading + Cable loss + Attenuator

Channel	Channel Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass / Fail
1	2412	16.22	30	PASS
6	2437	17.92	30	PASS
11	2462	15.49	30	PASS

Note : 1. For 802.11b Mode (Antenna 2)
2. At finial test to get the worst-case emission at 11Mbps.
3. The result basic equation calculation as follow :
Peak Power Output = Peak Power Reading + Cable loss + Attenuator

Channel	Channel Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass / Fail
1	2412	14.88	30	PASS
6	2437	18.38	30	PASS
11	2462	14.23	30	PASS

Note : 1. For 802.11g Mode (Antenna 2)
2. At finial test to get the worst-case emission at 6Mbps.
3. The result basic equation calculation as follow :
Peak Power Output = Peak Power Reading + Cable loss + Attenuator

Channel	Channel Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass / Fail
1	2412	16.22	25.1	PASS
6	2437	17.92	25.1	PASS
11	2462	15.49	25.1	PASS

Note : 1. For 802.11b Mode (Antenna 3)
2. At finial test to get the worst-case emission at 11Mbps.
3. The result basic equation calculation as follow :
Peak Power Output = Peak Power Reading + Cable loss + Attenuator

Channel	Channel Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass / Fail
1	2412	14.88	19.1	PASS
6	2437	18.38	19.1	PASS
11	2462	14.23	19.1	PASS

Note : 1. For 802.11g Mode (Antenna 3)
2. At finial test to get the worst-case emission at 6Mbps.
3. The result basic equation calculation as follow :
Peak Power Output = Peak Power Reading + Cable loss + Attenuator

Channel	Channel Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass / Fail
1	2412	16.22	26	PASS
6	2437	17.92	26	PASS
11	2462	15.49	26	PASS

Note : 1. For 802.11b Mode (Antenna 4)
2. At finial test to get the worst-case emission at 11Mbps.
3. The result basic equation calculation as follow :
Peak Power Output = Peak Power Reading + Cable loss + Attenuator

Channel	Channel Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass / Fail
1	2412	14.88	26	PASS
6	2437	18.38	26	PASS
11	2462	14.23	26	PASS

Note : 1. For 802.11g Mode (Antenna 4)
2. At finial test to get the worst-case emission at 6Mbps.
3. The result basic equation calculation as follow :
Peak Power Output = Peak Power Reading + Cable loss + Attenuator

6. POWER SPECTRAL DENSITY MEASUREMENT

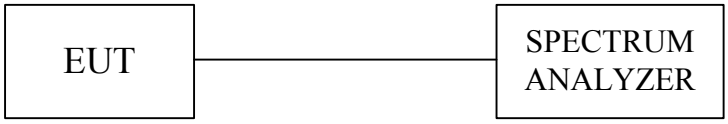
6.1 Test Equipments

Description & Manufacturer	Model No.	Serial No.	Date Of Calibration
ROHDE & SCHWARZ SPECTRUM ANALYZER	FSEK30	835253/002	JUN. 17, 2003
HP ATTENUATOR	8496B	3247A18505	Cal. on use
HP PLOTTER	7750A	725A 852141	N/A

Note：

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

6.2 Test Setup



6.3 Limits of Power Spectral Density Measurement

The Maximum Power Spectral Density Measurement is 8dBm.

6.4 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3KHz RBW and 30KHz VBW, set sweep time=span / 3KHz.

The power spectral density was measured and recorded.

The sweep time is allowed to be longer than span / 3KHz for a full response of the mixer in the spectrum analyzer.

6.5 Uncertainty of Conducted Emission

The uncertainty of conducted emission is ± 1.82dB.

6.6 Test Results

Input Power (System)	12VDC (Form Power Adapter)	**Environmental Conditions**	33.4℃, 43%RH,
Tested By	Nicky Liu		

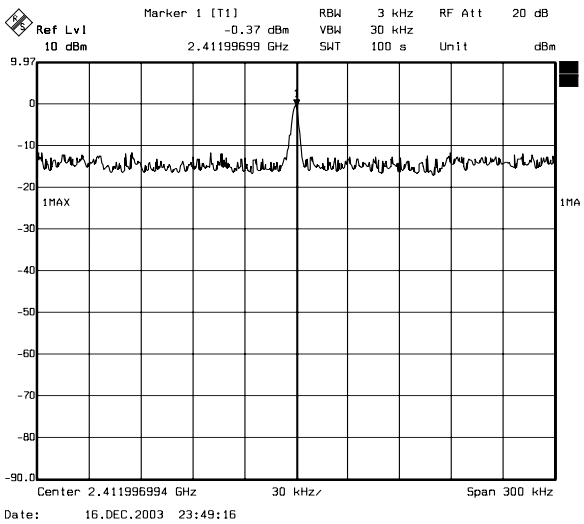
Channel	**Channel Frequency (MHz)**	**Final RF Power Level in 3KHz BW (dBm)**	**Maxmum Limit (dBm)**	**Pass / Fail**
1	2412	-0.37	8	PASS
6	2437	-2.40	8	PASS
11	2462	-4.70	8	PASS

Note:1. For 11Mbps (802.11b mode) at finial test to get the worst-case emission at 11Mbps.
2. The measurement value of RF Power Level + 10dB attenuator = Final RF Power Level.

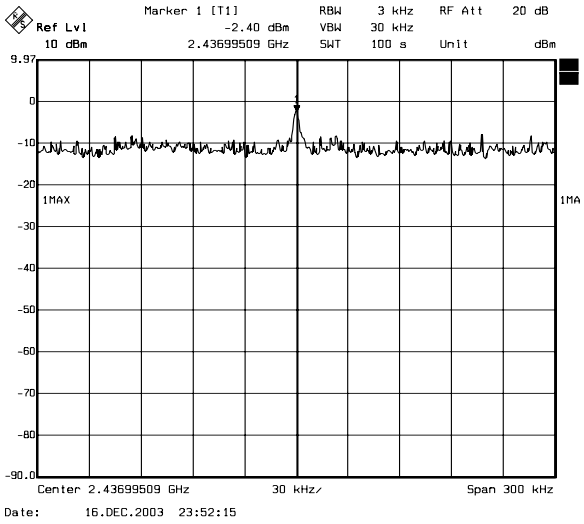
Channel	**Channel Frequency (MHz)**	**Final RF Power Level in 3KHz BW (dBm)**	**Maxmum Limit (dBm)**	**Pass / Fail**
1	2412	-6.04	8	PASS
6	2437	-6.36	8	PASS
11	2462	-6.03	8	PASS

Note:1. For 54Mbps (802.11g mode) at finial test to get the worst-case emission at 6Mbps.
2. The measurement value of RF Power Level + 10dB attenuator = Final RF Power Level.

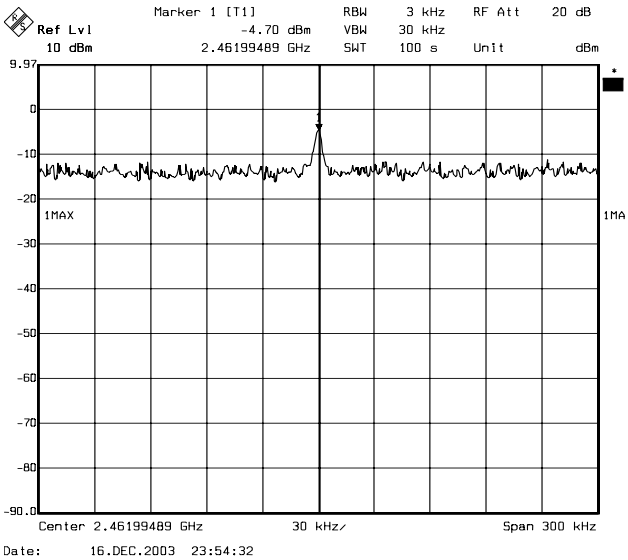
6.7 Photo of Power Spectral Density Measurement



Channel 1

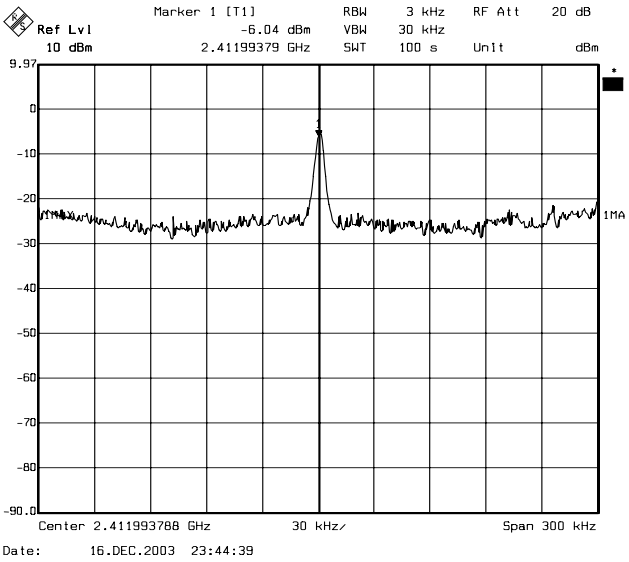


Channel 6

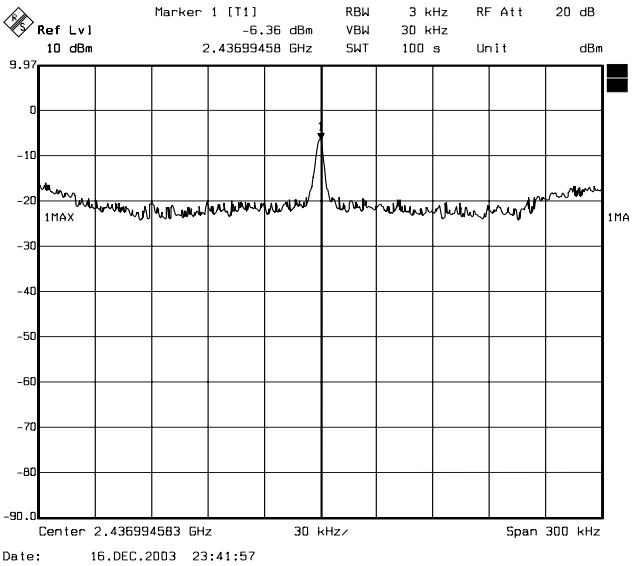


Channel 11

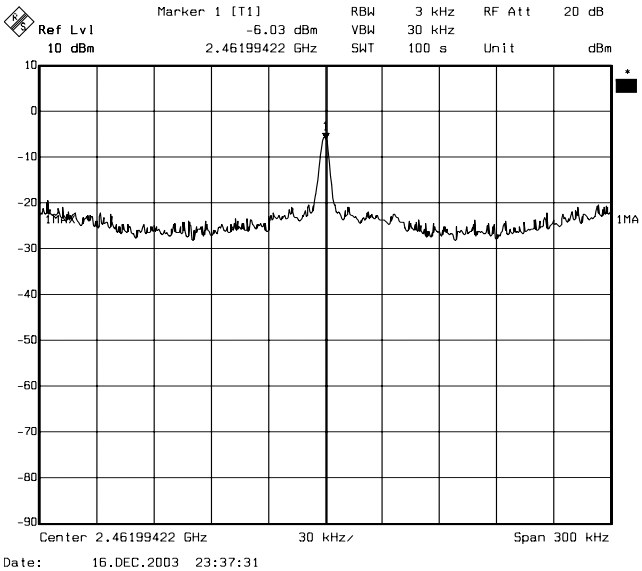
Note: For 802.11b Mode



Channel 1



Channel 6



Channel 11

Note: For 802.11g Mode

7. BAND EDGE MEASUREMENT

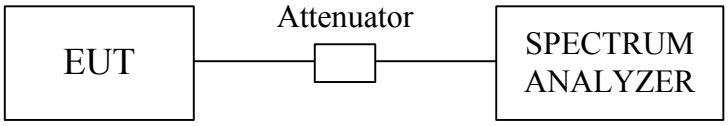
7.1 Test Equipments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration
ROHDE & SCHWARZ SPECTRUM ANALYZER	FSEK30	835253/002	JUN. 17, 2003
HP ATTENUATOR	8496B	3247A18505	Cal. on use
HP PLOTTER	7750A	725A 852141	N/A

Note：

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

7.2 Test Setup



7.3 Limits of Out of Band Emissions Measurement

1. Below –20dB of the highest emission level of operating band (in 100KHz Resolution Bandwidth).
2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.

7.4 Test Procedure

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to with suitable frequency span including 100KHz bandwidth from band edge. The band edges was measured and recorded.

7.5 Uncertainty of Conducted Emission

The uncertainty of conducted emission is ± 1.82dB.

7.6 Test Results

A. Conducted

Refer to 7.7 photo of out band Emission measurement

B. Radiated

For 802.11b mode

Refer to the section 3.6, the measured radiated band edge emissions are listed below :

Input Power (System)	12VDC (From Power Adapter)	**Environmental Conditions**	26℃, 48%RH
Tested By	Nicky Liu		

Band edge Frequency (MHz)		**Measured radiated band edge field strength (dBuV/m)**		**Radiated band edge field strength limit (dBuV/m)**		**Test result**
		Horizontal	**Vertical**	**Horizontal**	**Vertical**	
2399.90	PK	58.08	69.48	85.80	97.20	PASS
	AV	56.50	70.34	75.53	89.37	
2483.50	PK	46.08	57.08	74.00	74.00	PASS
	AV	33.15	41.27	54.00	54.00	

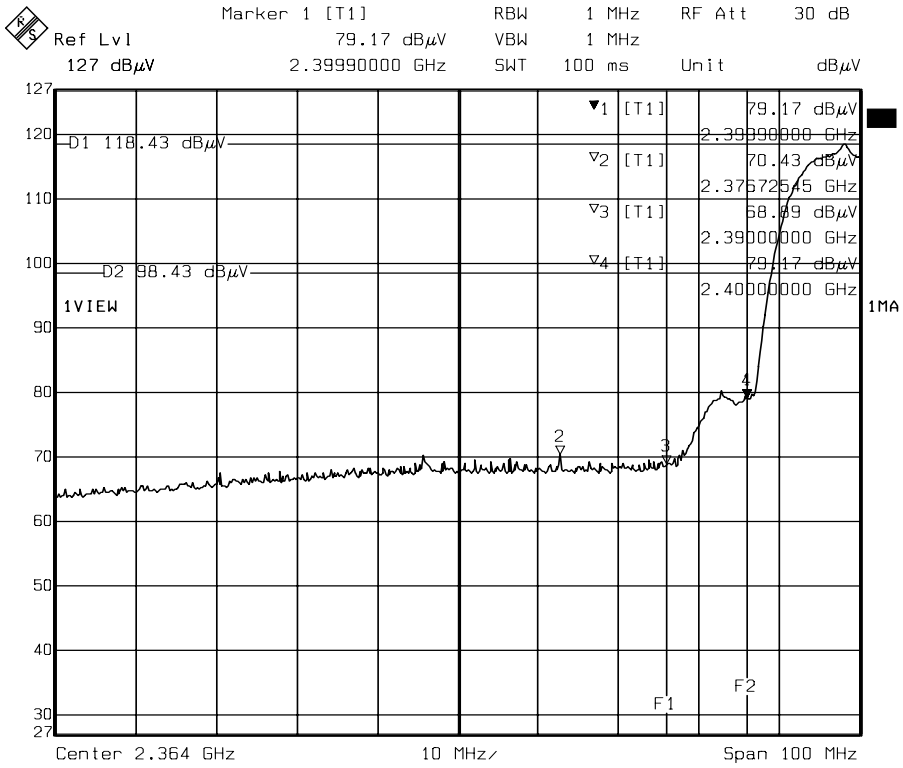
For 802.11g mode

Refer to the section 3.6, the measured radiated band edge emissions are listed below :

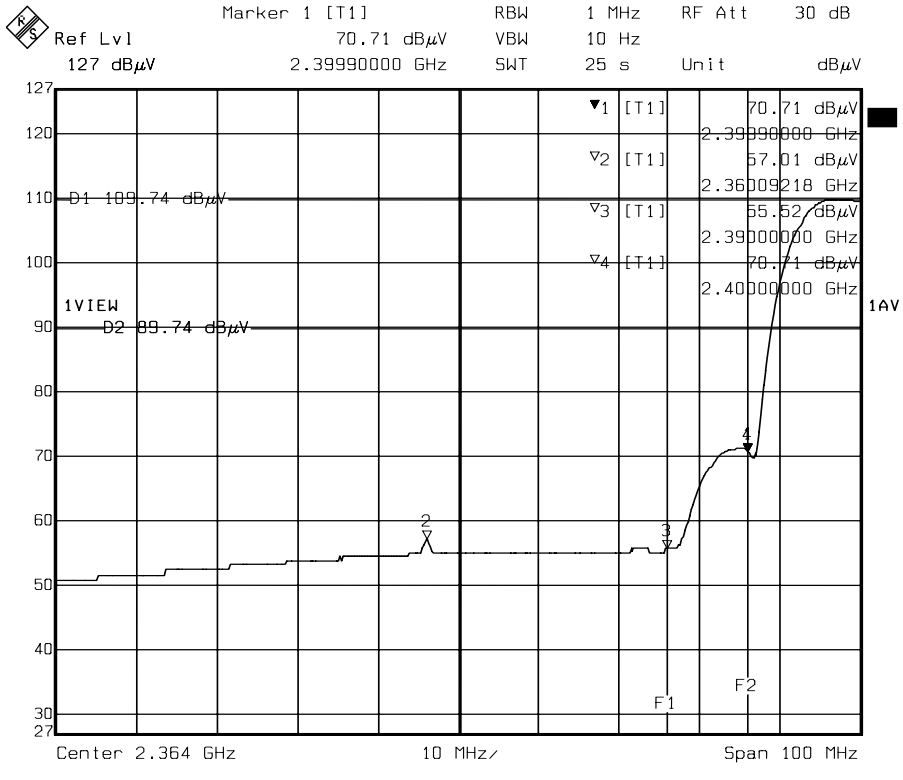
Band edge Frequency (MHz)		**Measured radiated band edge field strength (dBuV/m)**		**Radiated band edge field strength limit (dBuV/m)**		**Test result**
		Horizontal	**Vertical**	**Horizontal**	**Vertical**	
2399.90	PK	80.40	91.26	82.31	93.17	PASS
	AV	58.98	69.78	69.50	80.30	
2483.50	PK	57.65	69.79	74.00	74.00	PASS
	AV	42.92	51.91	54.00	54.00	

Note : 1. Radiated band edge field strength is measured with FCC recommended mark-delta method.
2. Measured radiated band edge field strength Test Results＝Radiated fundamental emission field strength - DELTA.
3. DELTA＝Relative measurement between conducted measured peak level of fundamental emission and relevant band edge emission. Please refer to 7.7 photo of Band Edge Measurement.

7.7 Photo of Out of Band Measurement

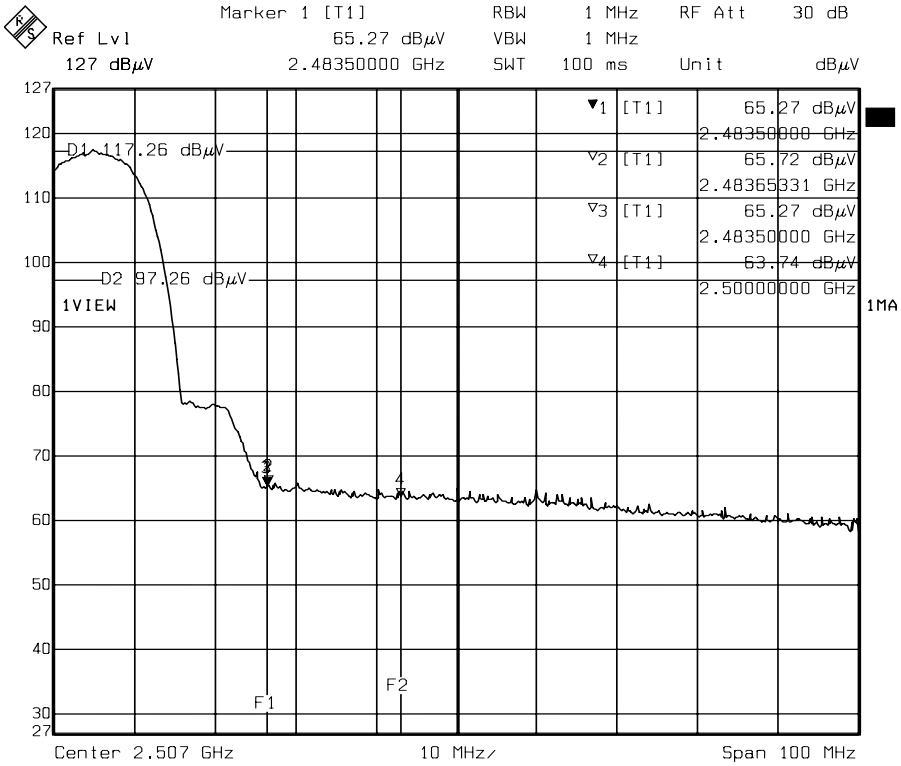


Channel 1 PK

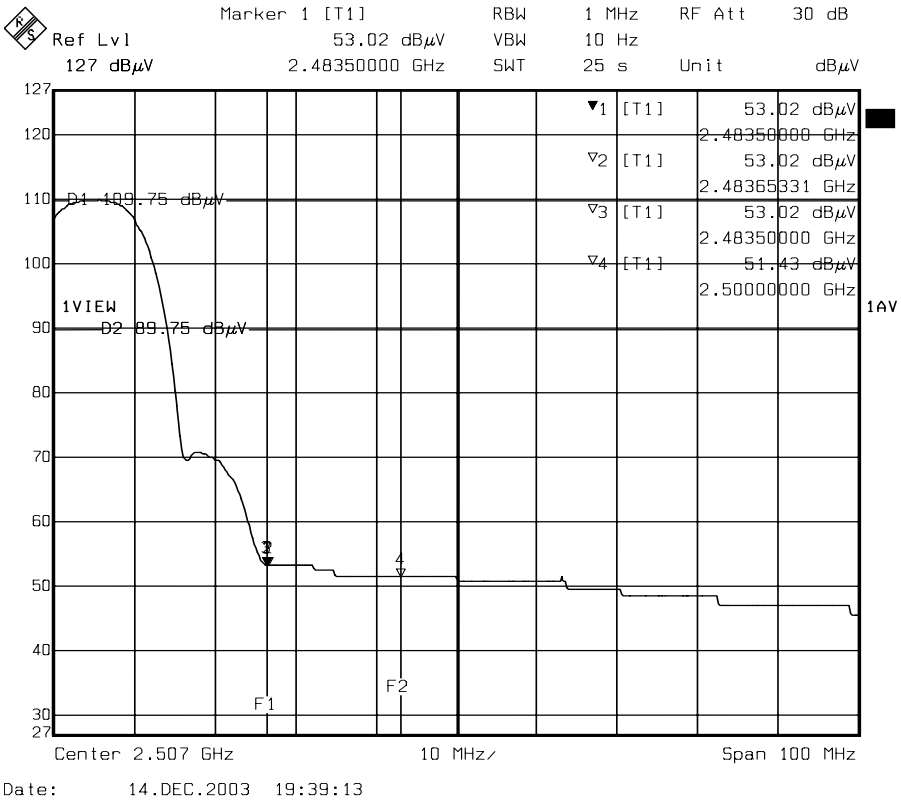


Channel 1 AVG

Note: For 802.11b Mode

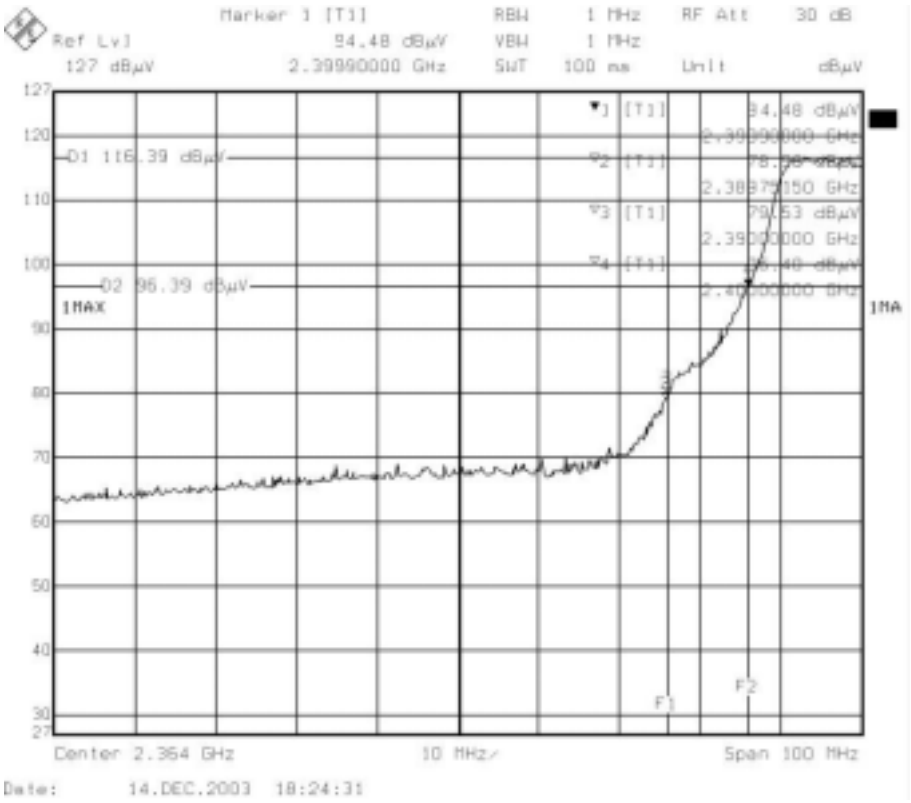


Channel 11 PK

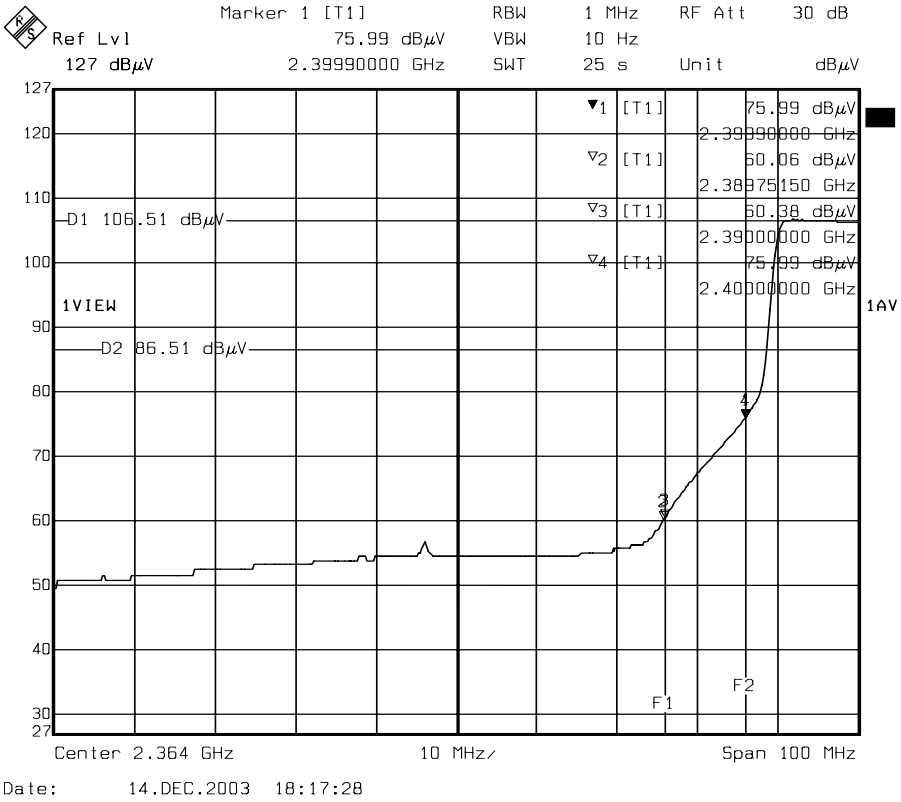


Channel 11 AVG

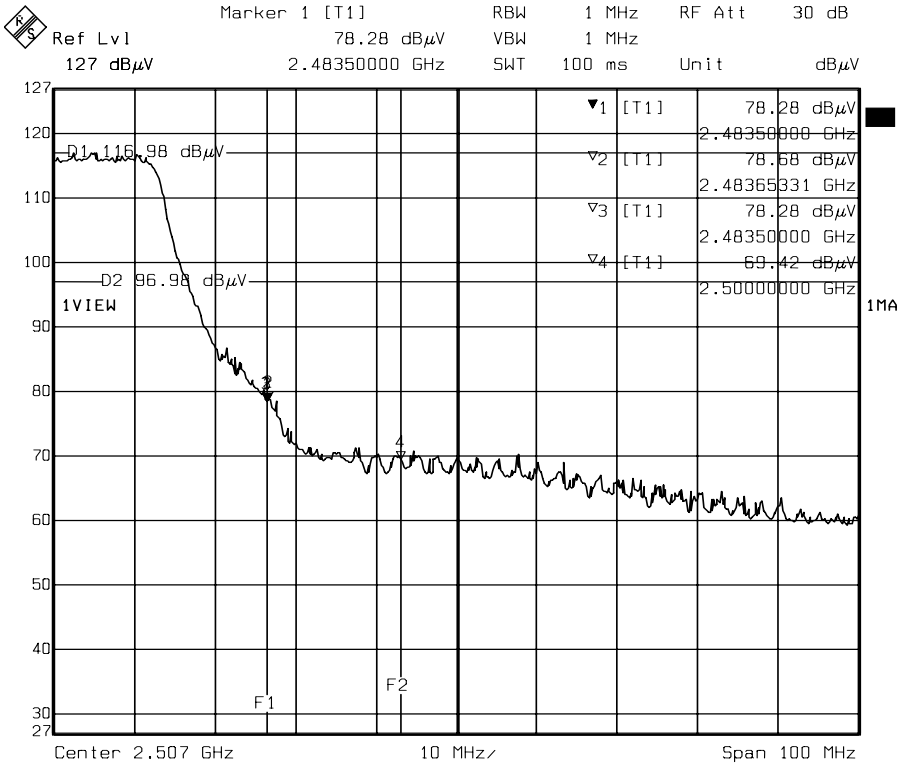
Note: For 802.11b Mode



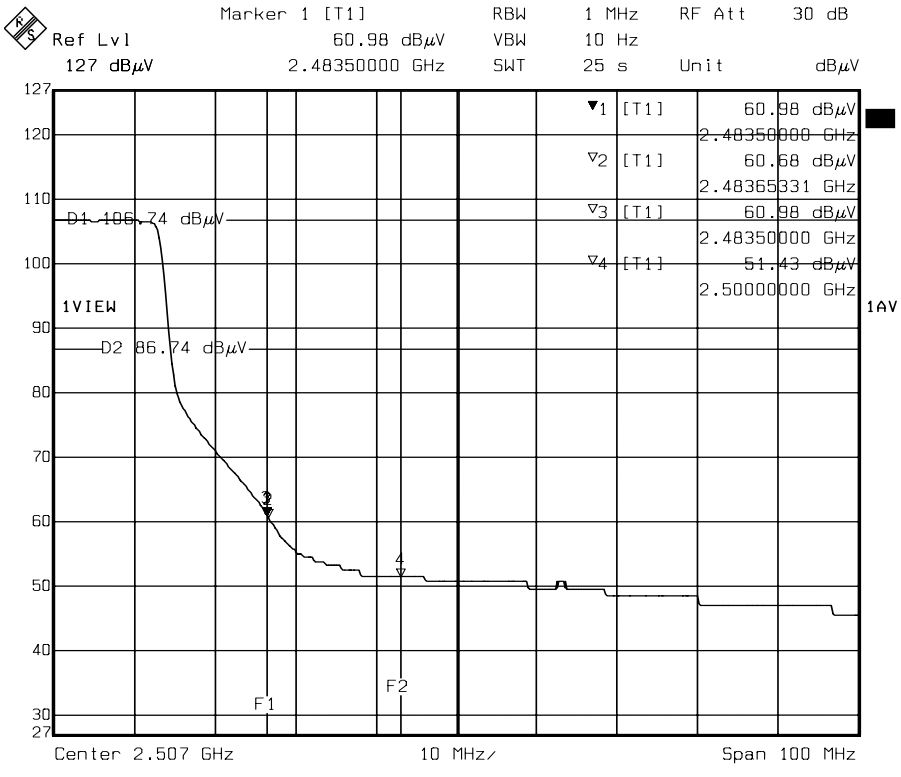
Channel 1 PK



Channel 1AVG
Note: For 802.11g Mode)



Channel 11 PK



Channel 11 AVG

Note: For 802.11g Mode

8. ANTENNA REQUIREMENT

8.1 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.

8.2 Antenna Connected Construction

The antenna (1) used in this product is Ceiling stand ANT24O5 antenna. And the maximum Gain of the antenna is only 5dBi. The Antenna connector is reverse SMA connector.

The antenna (2) used in this product is omnidirectional stand ANT24P12 antenna. And the maximum Gain of the antenna is only 12dBi. The Antenna connector is special connector ; with a adapter near antenna connector is special N-type connector and near EUT is reverse SMA connector.

The antenna (3) used in this product is Patch stand ANT24D18 antenna. And the maximum Gain of the antenna is only 18dBi. The Antenna connector is special connector ; with a adapter near antenna connector is special N-type connector and near EUT is reverse SMA connector.

9. RF EXPOSURE EVALUATION

According to FCC 1.1310 : The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)
LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Average Time
(A) Limits for Occupational / Control Exposures				
300-1,500	--	--	F/300	6
1,500-100,000	--	--	5	6
(B) Limits for General Population / Uncontrol Exposures				
300-1,500	--	--	F/1500	6
1,500-100,000	--	--	1	30

9.1 Friis Formula

Friis transmission formula : $Pd = (Pout*G)/(4*pi*r^2)$

Where
Pd = power density in mW/cm^2
Pout = output power to antenna in mW
G = gain of antenna in linear scale
Pi = 3.1416
R = distance between observation point and center of the radiator in cm

Pd id the limit of MPE, 1 mW/cm2. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

9.2 EUT Operating Condition

A software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

9.3 Test Result of RF Exposure Evaluation

Test Item : RF Exposure Evaluation Data
Test Mode : Normal Operation

9.3.1 Maximum PEAK Output Power

Refer to 5.6 Maximum peak Output Power is : 19.18 dBm (for 802.11b mode CH6),
19.90 dBm (for 802.11g mode CH6)

9.3.2 Output Power into Antenna & RF Exposure Evaluation Distance

Outpower (max) (dBm)	Cable length to antenna (m)	Min Cable Loss (dB)	Input Power to Antenna (dBm)	Antenna Model	Antenna Type	Antenna Gain (dBi)	EIRP (dBm)	EIRP (Watts)	MPE Distance (cm)	Pd at 20cm (mW/cm^2)	Comments
17.92		0	17.92	ANT24P2	Omni	2	19.92	0.098175	2.80	0.019531	Minimum separation shall be 20cm
17.92		0	17.92	ANT24P3	Omni	3	20.92	0.123595	3.14	0.024588	Minimum separation shall be 20cm
17.92		0	17.92	ANT24P4	Omni	4	21.92	0.155597	3.52	0.030955	Minimum separation shall be 20cm
17.92	1.5	1.1	16.82	ANT24S4	Omni Triband Stand	4	20.82	0.120781	3.10	0.024029	Minimum separation shall be 20cm
17.92		0	17.92	ANT24P5	Omni	5	22.92	0.195884	3.95	0.03897	Minimum separation shall be 20cm
17.92	1.5	1.1	16.82	ANT24S5	Omni Stand	5	21.82	0.152055	3.48	0.03025	Minimum separation shall be 20cm
17.92		0	17.92	ANT24P7	Omni	7	24.92	0.310456	4.97	0.061763	Minimum separation shall be 20cm
17.92	1.5	1.1	16.82	ANT24P93	Omni triband	9	25.82	0.381944	5.51	0.075985	Minimum separation shall be 20cm
17.92	1.5	1.1	16.82	ANT2409	Omni	9	25.82	0.381944	5.51	0.075985	Minimum separation shall be 20cm
17.92	1.5	1.1	16.82	ANT24P12	Omni	12	28.82	0.762079	7.79	0.151611	Minimum separation shall be 20cm
17.92	1.5	1.1	16.82	ANT24P123	Omni triband	12	28.82	0.762079	7.79	0.151611	Minimum separation shall be 20cm
17.92	1.5	1.1	16.82	ANT24O5	Ceiling	5	21.82	0.152055	3.48	0.03025	Minimum separation shall be 20cm
17.92	1.5	1.1	16.82	ANT24D12	Patch	12	28.82	0.762079	7.79	0.151611	Minimum separation shall be 20cm
17.92	1.5	1.1	16.82	ANT24D18	Patch	18	34.82	3.033891	15.54	0.603573	Minimum separation shall be 20cm

Note : 1. For 802.11b Mode.

2. The power density Pd (4th column) at a distance of 20cm calculated from the Friis transmission formula is far below the limit of 1 mW/cm^2 . The EUT is classified as mobile product. So, RF exposure limit warning or SAR test are not required.

Outpower (max) (dBm)	Cable length to antenna(m)	Min Cable Loss (dB)	Input Power to Antenna (dBm)	Antenna Model	Antenna Type	Antenna Gain (dBi)	EIRP (dBm)	EIRP (Watts)	MPE Distance(cm)	Pd at 20cm (mW/cm^2)	Comments
18.38		0	18.38	ANT24P2	Omni	2	20.38	0.109144	2.95	0.021714	Minimum separation shall be 20cm
18.38		0	18.38	ANT24P3	Omni	3	21.38	0.137404	3.31	0.027336	Minimum separation shall be 20cm
18.38		0	18.38	ANT24P4	Omni	4	22.38	0.172982	3.71	0.034414	Minimum separation shall be 20cm
18.38	1.5	1.1	17.28	ANT24S4	Omni Triband Stand	4	21.28	0.134276	3.27	0.026713	Minimum separation shall be 20cm
18.38		0	18.38	ANT24P5	Omni	5	23.38	0.217771	4.16	0.043324	Minimum separation shall be 20cm
18.38	1.5	1.1	17.28	ANT24S5	Omni Stand	5	22.28	0.169044	3.67	0.03363	Minimum separation shall be 20cm
18.38		0	18.38	ANT24P7	Omni	7	25.38	0.345144	5.24	0.068664	Minimum separation shall be 20cm
18.38	1.5	1.1	17.28	ANT24P93	Omni triband	9	26.28	0.42462	5.81	0.084475	Minimum separation shall be 20cm
18.38	1.5	1.1	17.28	ANT2409	Omni	9	26.28	0.42462	5.81	0.084475	Minimum separation shall be 20cm
18.38	1.5	1.1	17.28	ANT24P12	Omni	12	29.28	0.847227	8.21	0.16855	Minimum separation shall be 20cm
18.38	1.5	1.1	17.28	ANT24P123	Omni triband	12	29.28	0.847227	8.21	0.16855	Minimum separation shall be 20cm
18.38	1.5	1.1	17.28	ANT24O5	Ceiling	5	22.28	0.169044	3.67	0.03363	Minimum separation shall be 20cm
18.38	1.5	1.1	17.28	ANT24D12	Patch	12	29.28	0.847227	8.21	0.16855	Minimum separation shall be 20cm
18.38	1.5	1.1	17.28	ANT24D18	Patch	18	35.28	3.372873	16.38	0.671012	Minimum separation shall be 20cm

Note : 1. For 802.11g Mode.

2. The power density Pd (4th column) at a distance of 20cm calculated from the Friis transmission formula is far below the limit of 1 mW/cm^2 . The EUT is classified as mobile product. So, RF exposure limit warning or SAR test are not required.