



No.198 Kezhu Road, Science Town Economic& Technology
Development District Guangzhou, China 510663
Telephone: +86 (0) 20 8215 5555 Fax: +86 (0) 20 8207 5059
Email: sas_internet_operations@sas.com

Report No.: SZEMO081105729RFF
Page: 1 of 58
FCC ID: VSAPX6000I00001

TEST REPORT

Application No: SZEMO081105729RFF
Applicant/ Manufacturer: King Champion Industries Ltd.
Address of Applicant: Unit 1520, Phase 1 Metro Centre, 32 Lam Hing Street, Kowloon Bay,
Kowloon, Hong Kong
FCC ID: VSAPX6000I00001
**Fundamental Carrier
Frequency :** 2.412GHz to 2.462GHz
Equipment Under Test (EUT):
Name: Internet Radio
Model: PX-60i
Product Rated Voltage: 100V-240V
Standards: FCC PART 15 Subpart C: 2008
Date of Receipt: 20 November 2008
Date of Test: 20 November 2008 to 06 January 2009
Date of Issue: 07 January 2009

Test Result :	PASS *
----------------------	---------------

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Robinson Lo
Laboratory Manager

This report refers to the General Conditions for Inspection and Testing Services, printed overleaf
This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the SGS PRODUCT CERTIFICATION MARK.. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.
This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



2 Test Summary

Test	Test Requirement	Standard Paragraph	Result
Conducted Emissions	FCC PART 15:2008	Section 15.107 / 15.207	PASS
Radiated Emission	FCC PART 15:2008	Section 15.205/15.209	PASS*
Maximum Peak Output Power	FCC PART 15 :2008	Section 15.247 (b)	PASS
Occupied Bandwidth	FCC PART 15 :2008	Section 15.247 (a2)	PASS
Edges Measurement	FCC PART 15 2008	Section 15.247(d)	PASS
Power Spectral Density Measurement	FCC PART 15 :2008	Section 15.247 (e)	PASS
Antenna requirement.	FCC PART 15:2008	Section 15.247 (b)	PASS

Remark:

The EUT passed the Radiated Emission test after retest.

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



3 Contents

Page

1	COVER PAGE.....	1
2	TEST SUMMARY	2
3	CONTENTS	3
4	GENERAL INFORMATION.....	4
4.1	GENERAL DESCRIPTION OF E.U.T.....	4
4.2	TEST LOCATION	5
4.3	OTHER INFORMATION REQUESTED BY THE CUSTOMER.....	5
5	TEST RESULTS	6
5.1	TEST INSTRUMENTS.....	6
5.2	E.U.T. OPERATION	7
5.3	TEST PROCEDURE & MEASUREMENT DATA	8
5.3.1	Conducted Emissions.....	8
5.3.2	Radiated Emissions.....	15
5.3.2.1	Radiated emission below 1GHz.....	17
5.3.2.2	Transmitter emission above 1GHz.....	19
5.3.3	Occupied Bandwidth.....	26
5.3.4	Maximum Peak Output Power	30
5.3.5	Band Edges Measurement.....	33
5.3.6	Power Spectral Density Measurement	38
5.3.7	Antenna Requirement	43
5.3.7.1	Standard requirement.....	43
5.3.7.2	EUT Antenna	43

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



4 General Information

4.1 General Description of E.U.T.

Name:	Internet Radio
Item No.:	PX-60i
Frequency Range	802.11b/g:2412-2462MHz
Transfer Rate	802.11b mode: 1/2/5.5/11Mbps 802.11g mode 6/9/12/18/24/36/48/54Mbps
Number of Channel	11 channels (802.11b & 802.11g)
Antenna Type;	Integral
Type of Modulation	802.11b DBPSK(1MHz), DQPSK(2MHz), CCK(5.5/11MHz), 802.11g OFDM(6MHz-54MHz)

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

**Verify the Frequency and Channel**

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

Note:

1. Section 15.31(m): Measurements on intentional radiators or receivers shall be performed at three frequencies for operating frequency range over 10 MHz. The locations of these frequencies one near the top, one near the middle and one near the bottom.

2. So all the items as followed in testing report are need to test these three frequencies with 802.11b and 802.11g modulation type respectively:

Top: Channel 1: 2412MHz.

Middle: Channel 6: 2437MHz.

Bottom: Channel 11: 2462 MHz.

4.2 Test Location

No.198 Kezhu Road, Science Town Economic& Technology Development District Guangzhou, China 510663

Telephone: +86 (0) 20 8215 5555 Fax: +86 (0) 20 8207 5059

4.3 Other Information Requested by the Customer

None

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



5 Test Results

5.1 Test Instruments

RE in Chamber						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	16-06-2007	15-06-2009
2	EMI Test Receiver	Rohde & Schwarz	ESIB26	SEL0023	12-12-2008	11-12-2009
3	EMI Test software	AUDIX	E3	SEL0050	N/A	N/A
4	Coaxial cable	SGS	N/A	SEL0028	18-06-2008	17-06-2009
5	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEL0014	12-08-2008	11-08-2009
6	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEL0053	18-06-2008	17-06-2009
7	Double-ridged horn (1-18GHz)	ETS-LINDGREN	3117	SEL0005	12-08-2008	11-08-2009
8	Horn Antenna (18-26GHz)	ETS-LINDGREN	3160	SEL0076	12-08-2008	11-08-2009
9	Pre-amplifier (1-18GHz)	Rohde & Schwarz	AFS42-00101 800-25-S-42	SEL0081	18-06-2008	17-06-2009
10	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33- 18002650-30- 8P-44	SEL0080	18-06-2008	17-06-2009
11	Band filter	Amindeon	82346	SEL0094	18-06-2008	17-06-2009
12	Active Loop Antenna	Beijing Daze	ZN30900A	SEL0097	15-06-2008	14-06-2009

Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)
1	Shielding Room	ZhongYu Electron	GB-88	SEL0042	N/A	N/A
2	LISN	ETS-LINDGREN	3816/2	SEL0021	18-06-2008	17-06-2009
3	ISN	Rohde & Schwarz	ENY 22 1109	EMC0114	18-06-2008	17-06-2009
4	ISN	Rohde & Schwarz	ENY 41 1110	EMC0115	18-06-2008	17-06-2009
5	EMI Test Receiver	Rohde & Schwarz	ESCI	SEL0022	18-06-2008	17-06-2009
6	Coaxial Cable	SGS	N/A	SEL0024	18-06-2008	17-06-2009

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

SGS-CSTC Standards Technical Services Ltd.

5.3 Test Procedure & Measurement Data

5.3.1 Conducted Emissions

Test Requirement: FCC Part15 C Section 15.207

Test Method: ANSI C63.4:2003

Frequency Range: 150KHz to 30MHz

Class / Severity: Class B

Detector: RBW=9KHz VBW=30KHz

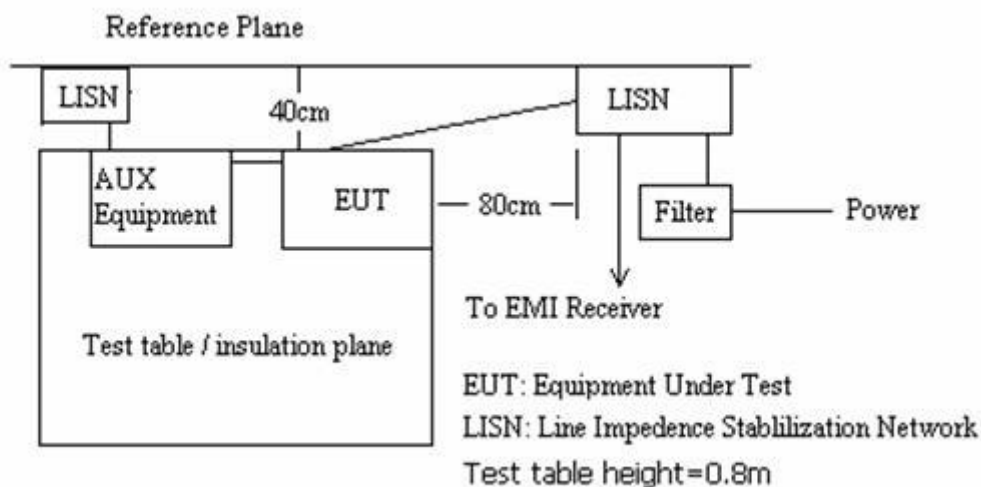
Operating Environment:

Temperature: 24 °C Humidity: 52 % RH Atmospheric Pressure: 1010 Mbar

EUT Operation: Test in normal mode. For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage.

Pre-Scan has been conducted to determine the worst-case mode from all possible Combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.

Plan View of Test Setup



FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



5.3.1.1 Measurement Data

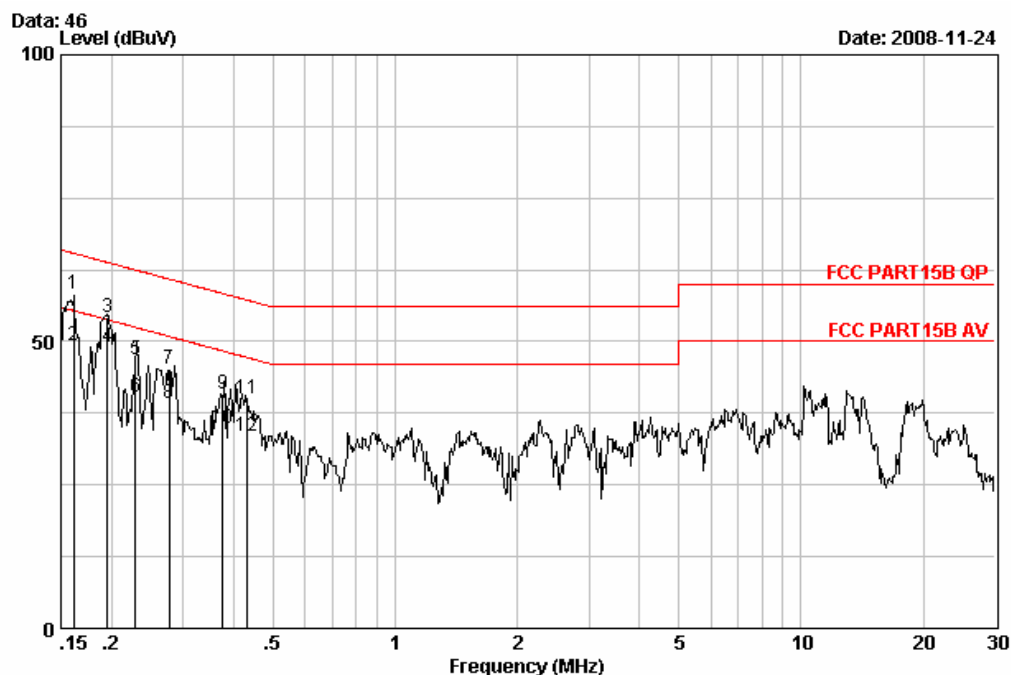
An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected. For EUT communicating with worst case mode.

The following Quasi-Peak and Average measurements were performed on the EUT:

AUX in mode

Live Line



Site : Shielding Room
Condition : FCC PART15B QP CE 11 LINE
EUT : Internet Radio
Job No. : 5729RFF
Test Mode : AUX IN

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.16155	0.04	0.00	58.40	58.44	65.38	-6.94	QP
2	0.16155	0.04	0.00	49.23	49.27	55.38	-6.11	Average
3	0.19550	0.04	0.00	54.20	54.24	63.80	-9.56	QP
4	0.19550	0.04	0.00	49.10	49.14	53.80	-4.66	Average
5	0.22918	0.04	0.00	46.85	46.89	62.48	-15.59	QP
6	0.22918	0.04	0.00	40.30	40.34	52.48	-12.14	Average
7	0.27734	0.05	0.00	45.10	45.15	60.90	-15.75	QP
8	0.27734	0.05	0.00	39.30	39.35	50.90	-11.55	Average
9	0.37512	0.05	0.00	40.70	40.75	58.39	-17.63	QP
10	0.37512	0.05	0.00	34.90	34.95	48.39	-13.43	Average
11	0.43281	0.06	0.00	40.10	40.16	57.20	-17.04	QP
12	0.43281	0.06	-0.04	33.52	33.53	47.20	-13.66	Average

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

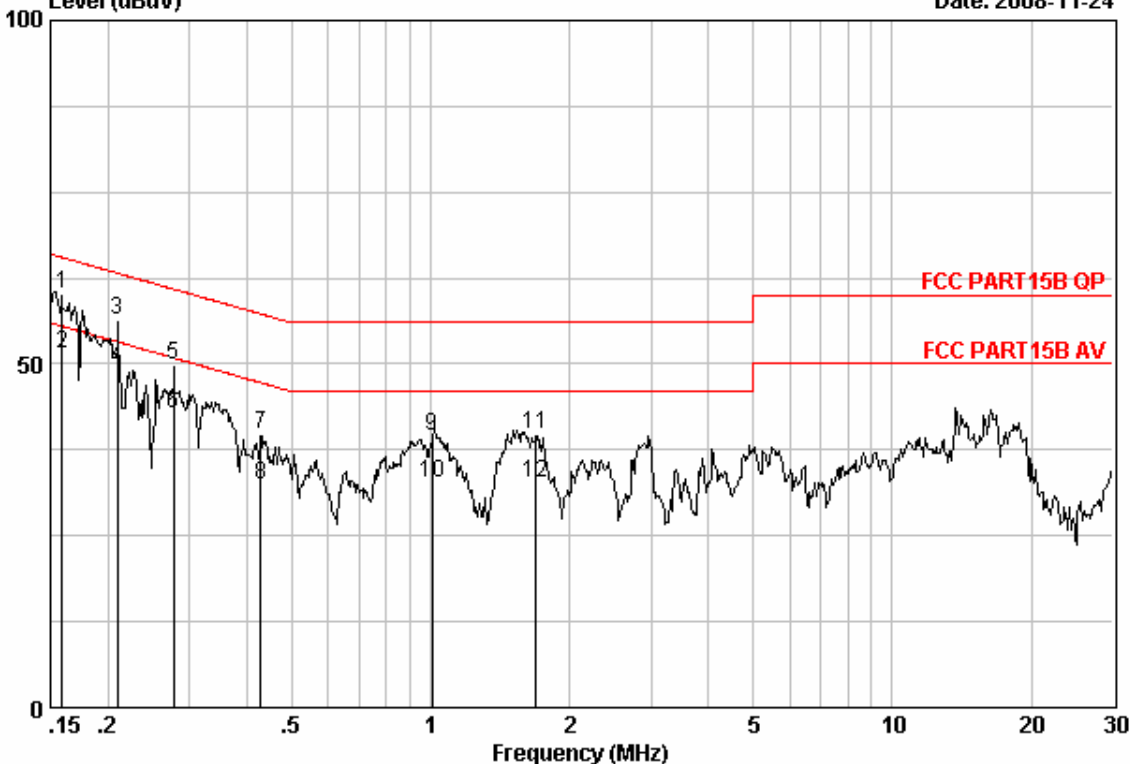


Neutral Line

Data: 47

Level (dBuV)

Date: 2008-11-24



Site : Shielding Room
Condition : FCC PART15B QP CE 11 NEUTRAL
EUT : Internet Radio
Job No. : 5729RFF
Test Mode : AUX IN

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.15900	0.04	0.00	60.20	60.24	65.52	-5.28	QP
2	0.15900	0.04	0.00	51.40	51.44	55.52	-4.08	Average
3	0.20944	0.04	0.00	56.30	56.34	63.23	-6.89	QP
4 @	0.20944	0.04	0.00	49.20	49.24	53.23	-3.99	Average
5	0.27734	0.05	0.00	49.80	49.85	60.90	-11.05	QP
6	0.27734	0.05	0.00	42.70	42.75	50.90	-8.15	Average
7	0.42825	0.06	0.00	39.60	39.66	57.29	-17.63	QP
8	0.42825	0.06	0.00	32.40	32.46	47.29	-14.83	Average
9	1.005	0.08	0.00	39.30	39.38	56.00	-16.62	QP
10	1.005	0.08	0.00	32.50	32.58	46.00	-13.42	Average
11	1.689	0.11	0.00	39.70	39.81	56.00	-16.19	QP
12	1.689	0.11	0.00	32.70	32.81	46.00	-13.19	Average

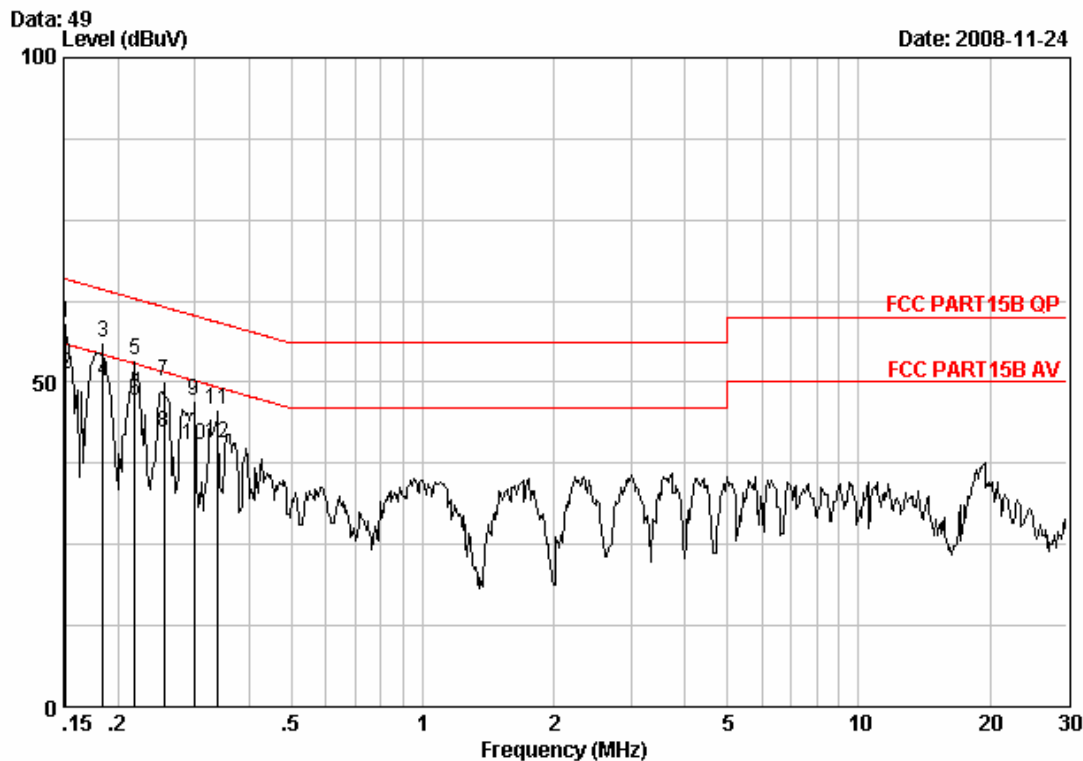
FCC ID: VSAPX6000I00001

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



WIFI mode

Live Line



Site : Shielding Room
Condition : FCC PART15B QP CE 11 LINE
EUT : Internet Radio
Job No. : 5729RFF
Test Mode : WIFI

	Freq	Cable	LISN	Read	Limit	Over	
	MHz	Loss	Factor	Level	Line	Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB
1	0.15160	0.04	0.00	59.10	59.14	65.91	-6.77 QP
2	0.15160	0.04	0.00	51.30	51.34	55.91	-4.57 Average
3	0.18443	0.04	0.00	56.10	56.14	64.28	-8.14 QP
4 @	0.18443	0.04	0.00	50.20	50.24	54.28	-4.04 Average
5	0.21851	0.04	0.00	53.23	53.27	62.88	-9.60 QP
6	0.21851	0.04	0.00	47.20	47.24	52.88	-5.63 Average
7	0.25480	0.05	0.00	50.21	50.26	61.60	-11.34 QP
8	0.25480	0.05	0.00	42.20	42.25	51.60	-9.35 Average
9	0.29869	0.05	0.00	47.20	47.25	60.28	-13.03 QP
10	0.29869	0.05	0.00	40.20	40.25	50.28	-10.03 Average
11	0.33920	0.05	0.00	45.60	45.65	59.22	-13.57 QP
12	0.33920	0.05	0.00	40.50	40.55	49.22	-8.67 Average

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

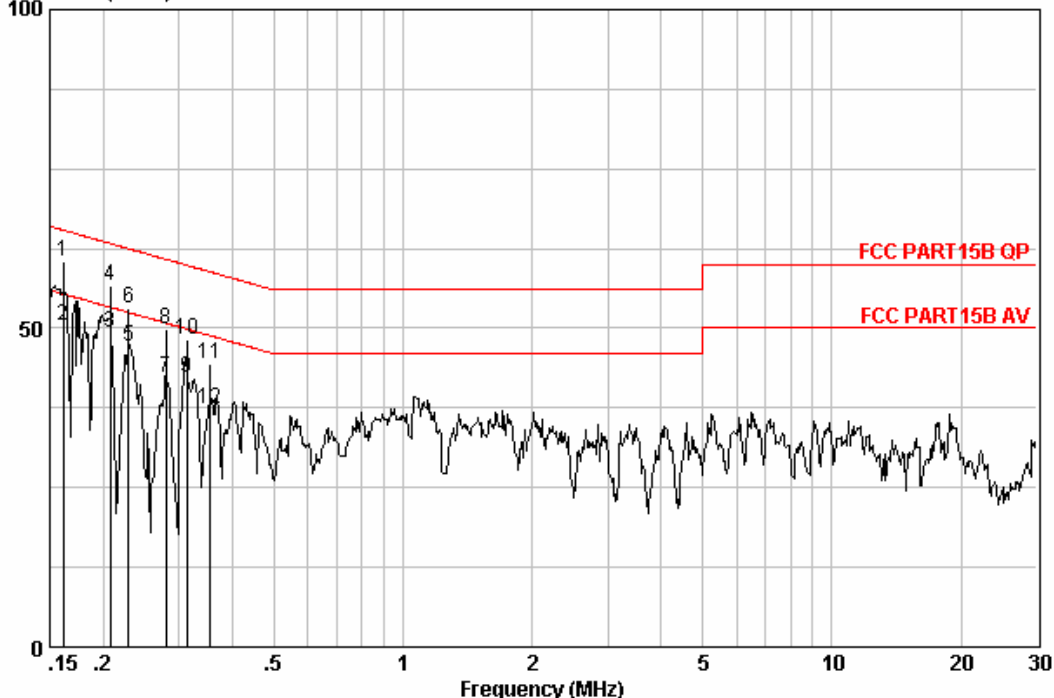


Neutral Line

Data: 48

Level (dBuV)

Date: 2008-11-24



Site : Shielding Room
Condition : FCC PART15B QP CE 11 NEUTRAL
EUT : Internet Radio
Job No. : 5729RFF
Test Mode : WIFI

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.16155	0.04	0.00	60.40	60.44	65.38	-4.94	QP
2	0.16155	0.04	0.00	50.40	50.44	55.38	-4.94	Average
3 @	0.20723	0.04	0.00	49.30	49.34	53.32	-3.97	Average
4	0.20723	0.04	0.00	56.70	56.74	63.32	-6.57	QP
5	0.22918	0.04	0.00	47.14	47.18	52.48	-5.30	Average
6	0.22918	0.04	0.00	53.20	53.24	62.48	-9.24	QP
7	0.28029	0.05	0.00	42.10	42.15	50.81	-8.66	Average
8	0.28029	0.05	0.00	49.80	49.85	60.81	-10.96	QP
9	0.31328	0.05	0.00	42.30	42.35	49.88	-7.53	Average
10	0.31328	0.05	-0.04	48.19	48.20	59.88	-11.68	QP
11	0.35388	0.05	0.00	44.30	44.35	58.87	-14.52	QP
12	0.35388	0.05	0.00	37.20	37.25	48.87	-11.62	Average

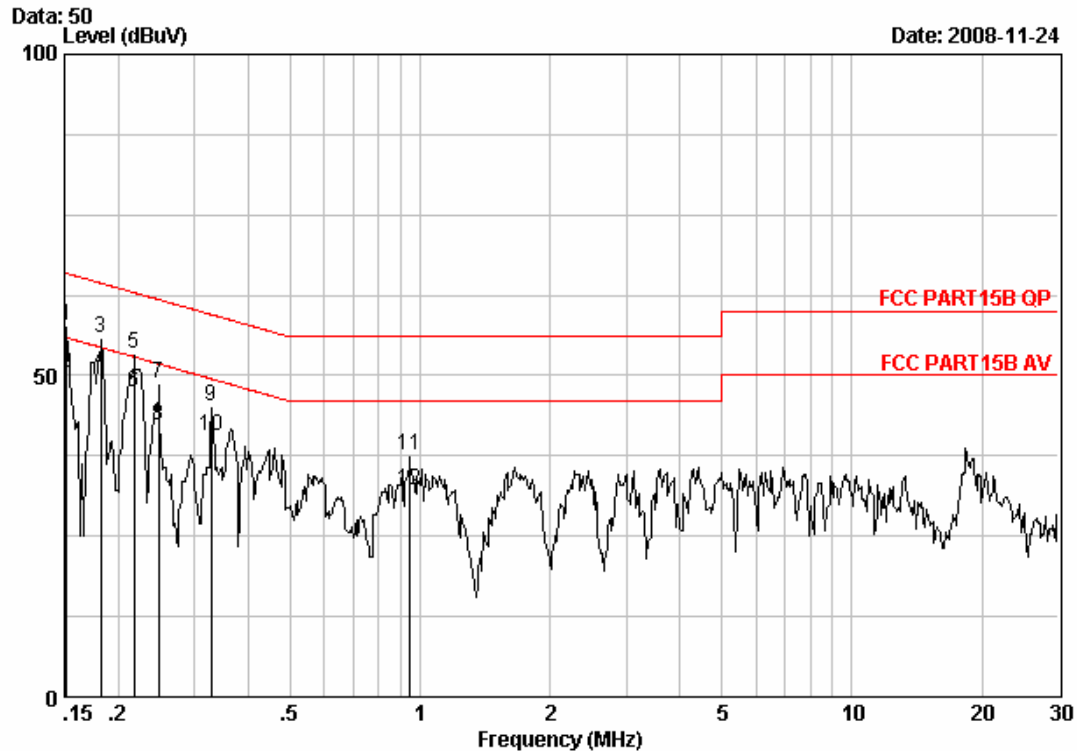
FCC ID: VSAPX6000I00001

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



LAN mode

Live Line



Site : Shielding Room
Condition : FCC PART15B QP CE 11 LINE
EUT : Internet Radio
Job No. : S729RF
Test Mode : LAN

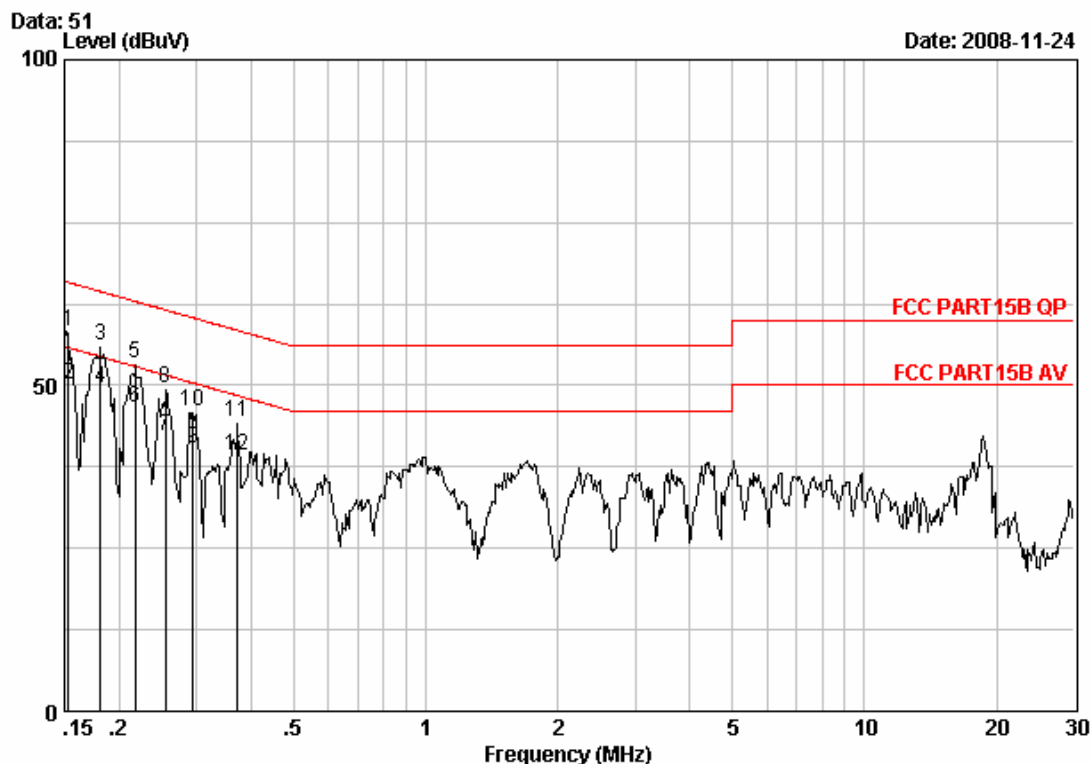
	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.15160	0.04	0.00	57.80	57.84	65.91	-8.07	QP
2	0.15160	0.04	0.00	50.30	50.34	55.91	-5.57	Average
3	0.18249	0.04	0.00	55.80	55.84	64.37	-8.53	QP
4 @	0.18249	0.04	0.00	50.60	50.64	54.37	-3.73	Average
5	0.21735	0.04	0.00	53.40	53.44	62.92	-9.48	QP
6	0.21735	0.04	0.00	47.30	47.34	52.92	-5.58	Average
7	0.24814	0.05	0.00	48.80	48.85	61.82	-12.97	QP
8	0.24814	0.05	0.00	42.20	42.25	51.82	-9.57	Average
9	0.32858	0.05	0.00	45.10	45.15	59.49	-14.34	QP
10	0.32858	0.05	0.00	40.60	40.65	49.49	-8.84	Average
11	0.94809	0.08	0.00	37.40	37.48	56.00	-18.52	QP
12	0.94809	0.08	0.00	32.20	32.28	46.00	-13.72	Average

FCC ID: VSAPX6000I00001

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



Neutral Line



Site : Shielding Room
Condition : FCC PART15B QP CE 11 NEUTRAL
EUT : Internet Radio
Job No. : 5729RF
Test Mode : LAN

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.15321	0.04	0.00	58.20	58.24	65.82	-7.58	QP
2	0.15321	0.04	0.00	50.10	50.14	55.82	-5.68	Average
3	0.18152	0.04	0.00	56.20	56.24	64.42	-8.18	QP
4 @	0.18152	0.04	0.00	49.60	49.64	54.42	-4.78	Average
5	0.21735	0.04	0.00	53.50	53.54	62.92	-9.38	QP
6	0.21735	0.04	0.00	46.50	46.54	52.92	-6.38	Average
7	0.25480	0.05	0.00	42.20	42.25	51.60	-9.35	Average
8	0.25480	0.05	0.00	49.50	49.55	61.60	-12.05	QP
9	0.29398	0.05	0.00	40.20	40.25	50.41	-10.16	Average
10	0.29398	0.05	0.00	46.10	46.15	60.41	-14.26	QP
11	0.37117	0.05	0.00	44.30	44.35	58.47	-14.12	QP
12	0.37117	0.05	0.00	39.20	39.25	48.47	-9.22	Average

TEST RESULTS: The unit does meet the FCC requirement

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



5.3.2 Radiated Emissions

Test Requirement: FCC Part15 C Section 15.247, 15.209 and 15.205
Test Method: ANSI C63.4 & DA 00-705
Select test mode: 802.11 b 1Mbps & 802.11g 6Mbps
Test site: Measurement Distance: 3m (Semi-Anechoic Chamber)
Test Range: 30MHz to 25GHz

30MHz-1000MHz: RBW=100KHz, VBW=300KHz

Above 1GHz: PK RBW=1MHz, VBW=3MHz

Average RBW=1MHz, VBW=10Hz

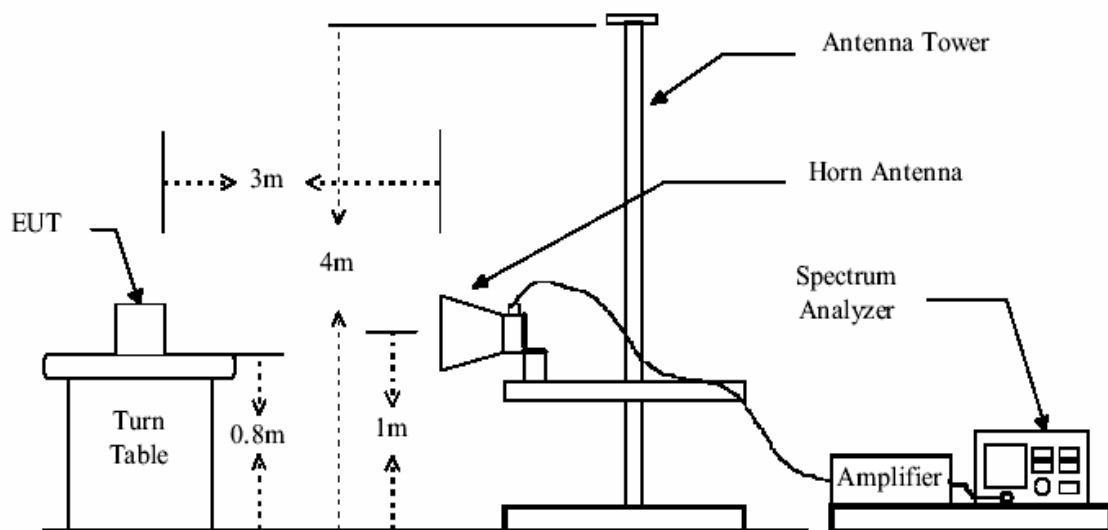
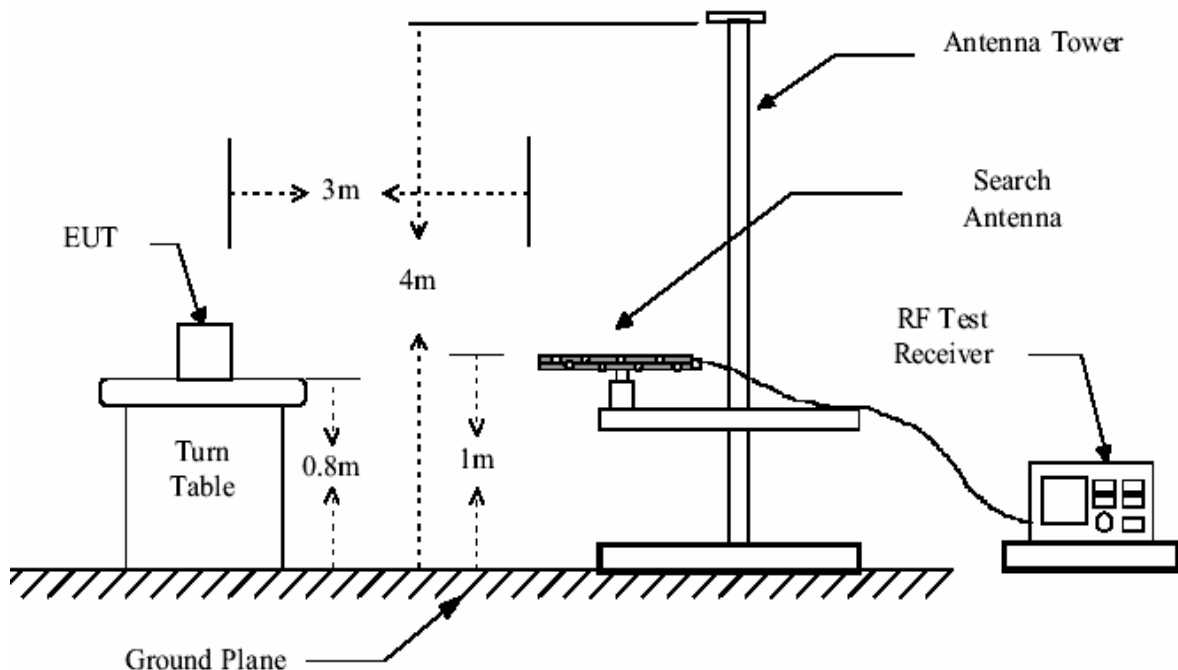
15.209 Limit: 40.0 dB μ V/m between 30MHz & 88MHz
43.5 dB μ V/m between 88MHz & 216MHz
46.0 dB μ V/m between 216MHz & 960MHz
above 960MHz: Average value Limit 54.0 dB μ V/m
Peak value Limit 74.0 dB μ V/m.

Test Procedure: The procedure used was ANSI Standard C63.4-2003. The receiver was scanned from 30MHz to 25GHz. When an emission was found, the table was rotated to produce the maximum signal strength. An initial pre-scan was performed for in peak detection mode using the receiver. The EUT was measured for both the Horizontal and Vertical polarities and performed a pre-test three orthogonal planes. For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage. The worst case emissions were reported.

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

Test Configuration



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

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

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



5.3.2.1 Radiated emission below 1GHz

Test in AUX in mode

Vertical

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)
113.420	1.24	8.36	27.74	46.97	28.83	43.50	-14.67
137.670	1.30	8.00	27.54	46.14	27.90	43.50	-15.60
238.550	1.62	11.93	26.96	48.00	34.59	46.00	-11.41
353.980	2.07	15.49	27.12	44.54	34.98	46.00	-11.02
431.992	2.34	16.52	27.51	51.57	42.92	46.00	-3.08
696.390	2.89	21.58	27.29	37.18	34.36	46.00	-11.64

Horizontal

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)
85.290	1.10	8.26	27.97	52.84	34.23	40.00	-5.77
129.910	1.28	7.70	27.61	50.71	32.08	43.50	-11.42
202.660	1.42	10.32	27.14	44.17	28.77	43.50	-14.73
443.220	2.38	16.74	27.55	47.60	39.17	46.00	-6.83
568.350	2.67	19.05	27.65	45.30	39.37	46.00	-6.63
695.420	2.89	21.58	27.30	42.40	39.57	46.00	-6.43

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

**Test in WIFI mode.****Vertical**

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)
40.670	0.61	10.93	28.09	44.86	28.31	40.00	-11.69
82.380	1.10	7.95	27.99	46.87	27.93	40.00	-12.07
133.790	1.29	7.86	27.57	51.22	32.80	43.50	-10.70
471.350	2.49	17.67	27.63	45.54	38.07	46.00	-7.93
568.350	2.67	19.05	27.65	45.82	39.89	46.00	-6.11
669.230	2.84	21.24	27.38	44.39	41.09	46.00	-4.91

Horizontal

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)
129.910	1.28	7.70	27.61	46.74	28.11	43.50	-15.39
163.860	1.34	9.56	27.36	47.70	31.24	43.50	-12.26
202.660	1.42	10.32	27.14	46.96	31.56	43.50	-11.94
353.980	2.07	15.49	27.12	45.17	35.61	46.00	-10.39
493.660	2.58	17.80	27.69	38.37	31.06	46.00	-14.94
695.420	2.89	21.58	27.30	37.02	34.19	46.00	-11.81

Test in LAN mode.**Vertical**

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)
62.980	0.80	7.11	28.03	57.04	36.92	40.00	-3.08
110.510	1.23	8.57	27.77	53.84	35.87	43.50	-7.63
163.860	1.34	9.56	27.36	50.96	34.50	43.50	-9.00
246.310	1.66	12.19	26.93	51.48	38.40	46.00	-7.60
443.220	2.38	16.74	27.55	46.66	38.23	46.00	-7.77
669.230	2.84	21.24	27.38	43.81	40.51	46.00	-5.49

Horizontal

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)
40.670	0.61	11.53	28.09	51.36	35.41	40.00	-4.59
66.860	0.80	6.99	28.01	52.58	32.36	40.00	-7.64
110.510	1.23	8.57	27.77	54.58	36.61	43.50	-6.89
257.950	1.71	12.47	26.88	53.14	40.44	46.00	-5.56
354.950	2.08	15.53	27.12	50.68	41.17	46.00	-4.83
436.430	2.35	16.62	27.53	44.60	36.04	46.00	-9.96

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



5.3.2.2 Transmitter emission above 1GHz

For EUT communicating with 802.11b Mode(2.412GHz)

Peak Measurement

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2400.000	4.97	40.1	44.75	61.99	62.31	74.00	-11.69	Vertical
2439.000	5.03	39.97	44.77	66.86	67.09	74.00	-6.91	Vertical
1810.750	4.20	41.84	44.69	54.98	56.33	74.00	-17.67	Vertical
4795.250	6.60	44.60	45.39	49.80	55.61	74.00	18.39	Vertical
7286.250	7.60	46.67	44.42	48.95	58.80	74.00	15.20	Vertical
9659.750	8.55	49.90	42.17	45.36	61.64	74.00	12.36	Vertical
2400.000	4.97	40.1	44.75	64.47	64.79	74.00	-9.21	Horizontal
2439.000	5.03	39.97	44.77	58.94	59.17	74.00	-14.83	Horizontal
1822.500	4.20	41.84	44.69	56.17	57.52	74.00	-16.48	Horizontal
4795.250	6.60	44.60	45.39	51.03	56.84	74.00	-17.16	Horizontal
7215.750	7.63	46.53	44.49	49.74	59.41	74.00	-14.59	Horizontal
9624.500	8.53	49.70	42.20	44.70	60.73	74.00	-13.27	Horizontal

Average Measurement

Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamplifier factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Over limit	polarization
2400.000	4.97	40.10	44.75	45.01	45.33	54.00	-8.67	Vertical
2439.000	5.03	39.97	44.77	44.58	44.81	54.00	-9.19	Vertical
1528.750	3.79	43.00	44.73	36.07	38.13	54.00	-15.87	Vertical
4854.000	6.63	44.66	45.41	35.73	41.61	54.00	-12.39	Vertical
7262.750	7.62	46.60	44.46	34.56	44.32	54.00	-9.68	Vertical
9659.750	8.55	49.90	42.17	31.70	47.98	54.00	-6.02	Vertical
2400.000	4.97	40.10	44.75	45.08	45.40	54.00	-8.60	Horizontal
2439.000	5.03	39.97	44.77	44.60	44.83	54.00	-9.17	Horizontal
1481.750	3.72	43.01	44.73	36.20	38.20	54.00	-15.80	Horizontal
4818.750	6.62	44.63	45.40	35.75	41.60	54.00	-12.40	Horizontal
7286.250	7.60	46.67	44.42	34.50	44.35	54.00	-9.65	Horizontal
9624.500	8.53	49.70	42.20	31.61	47.64	54.00	-6.36	Horizontal

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



For EUT communicating with 802.11b Mode(2.437GHz)

Peak Measurement

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2400.000	4.97	40.10	44.75	63.04	63.36	74.00	-10.64	Vertical
2483.500	5.08	39.88	44.77	63.96	64.15	74.00	-9.85	Vertical
1787.250	4.15	41.97	44.69	64.75	66.18	74.00	-7.82	Vertical
4854.000	6.63	44.66	45.41	55.87	61.75	74.00	-12.25	Vertical
7215.750	7.63	46.53	44.49	55.44	65.11	74.00	-8.89	Vertical
2400.000	4.97	40.10	44.75	60.37	60.69	74.00	-13.31	Horizontal
2483.500	5.08	39.88	44.77	60.17	60.36	74.00	-13.64	Horizontal
1963.500	4.42	41.22	44.66	63.59	64.57	74.00	-9.43	Horizontal
2010.500	4.47	41.08	44.66	62.65	63.54	74.00	-10.46	Horizontal
4854.000	6.63	44.66	45.41	57.73	63.61	74.00	-10.39	Horizontal
7262.750	7.62	46.60	44.46	56.11	65.87	74.00	-8.13	Horizontal

Average Measurement

Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Over limit	polarization
2400.000	4.97	40.10	44.75	45.17	45.49	54.00	-8.51	Vertical
2483.500	5.08	39.88	44.77	46.25	46.44	54.00	-7.56	Vertical
1540.500	3.81	42.93	44.72	36.00	38.02	54.00	-15.98	Vertical
4830.500	6.62	44.63	45.40	36.01	41.86	54.00	-12.14	Vertical
7368.500	7.56	46.84	44.34	35.46	45.52	54.00	-8.48	Vertical
9518.750	8.44	49.08	42.30	32.34	47.56	54.00	-6.44	Vertical
2400.000	4.97	40.10	44.75	44.83	45.15	54.00	-8.85	Horizontal
2483.500	5.08	39.88	44.77	45.11	45.30	54.00	-8.70	Horizontal
1634.500	3.93	42.59	44.71	35.98	37.79	54.00	-16.21	Horizontal
4877.500	6.64	44.68	45.42	36.11	42.01	54.00	-11.99	Horizontal
7286.250	7.60	46.67	44.42	35.54	45.39	54.00	-8.61	Horizontal
9695.000	8.58	50.11	42.14	32.29	48.84	54.00	-5.16	Horizontal

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



For EUT communicating with 802.11b Mode(2.462GHz)

Peak Measurement

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2483.500	5.08	39.88	44.77	63.45	63.64	74.00	-10.36	Vertical
2500.000	5.10	39.84	44.78	63.02	63.18	74.00	-10.82	Vertical
1963.500	4.42	41.22	44.66	63.10	64.08	74.00	-9.92	Vertical
4818.750	6.62	44.63	45.40	47.77	53.62	74.00	-20.38	Vertical
7215.750	7.63	46.53	44.49	48.17	57.84	74.00	-16.16	Vertical
9659.750	8.55	49.90	42.17	44.50	60.78	74.00	-13.22	Vertical
2483.500	5.08	39.88	44.77	70.09	70.28	74.00	-3.72	Horizontal
2500.000	5.10	39.84	44.78	69.07	69.23	74.00	-4.77	Horizontal
1963.500	4.42	41.22	44.66	59.13	60.11	74.00	-13.89	Horizontal
4830.500	6.62	44.63	45.40	47.73	53.58	74.00	-20.42	Horizontal
7215.750	7.63	46.53	44.49	47.21	56.88	74.00	-17.12	Horizontal
9659.750	8.55	49.90	42.17	43.79	60.07	74.00	-13.93	Horizontal

Average Measurement

Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Over limit	polarization
2483.500	5.08	39.88	44.77	43.37	43.56	54.00	-10.44	Vertical
2500.000	5.10	39.84	44.78	39.73	39.89	54.00	-14.11	Vertical
1575.750	3.86	42.80	44.72	36.01	37.95	54.00	-16.05	Vertical
4818.750	6.62	44.63	45.40	35.98	41.83	54.00	-12.17	Vertical
7239.250	7.62	46.57	44.48	35.59	45.30	54.00	-8.70	Vertical
9624.500	8.53	49.70	42.20	32.37	48.40	54.00	-5.60	Vertical
2483.500	5.08	39.88	44.77	43.60	43.79	54.00	-10.21	Horizontal
2500.000	5.10	39.84	44.78	39.70	39.86	54.00	-14.14	Horizontal
1540.500	3.81	42.93	44.72	36.01	38.03	54.00	-15.97	Horizontal
4865.750	6.63	44.66	45.41	36.01	41.89	54.00	-12.11	Horizontal
7262.750	7.62	46.60	44.46	35.60	45.36	54.00	-8.64	Horizontal
9695.000	8.58	50.11	42.14	32.31	48.86	54.00	-5.14	Horizontal

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



For EUT communicating with 802.11g Mode(2.412GHz)

Peak Measurement

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2400.000	4.97	40.10	44.75	60.63	60.95	74.00	-13.05	Vertical
2439.000	5.03	39.97	44.77	52.89	53.12	74.00	-20.88	Vertical
1963.500	4.42	41.22	44.66	58.41	59.39	74.00	-14.61	Vertical
4830.500	6.62	44.63	45.40	49.82	55.67	74.00	-18.33	Vertical
7286.250	7.60	46.67	44.42	49.09	58.94	74.00	-15.06	Vertical
9695.000	8.58	50.11	42.14	47.90	64.45	74.00	-9.55	Vertical
2400.000	4.97	40.10	44.75	62.24	62.56	74.00	-11.44	Horizontal
2439.000	5.03	39.97	44.77	49.47	49.70	74.00	-24.30	Horizontal
1963.500	4.42	41.22	44.66	63.40	64.38	74.00	-9.62	Horizontal
4830.500	6.62	44.63	45.40	50.26	56.11	74.00	-17.89	Horizontal
7215.750	7.63	46.53	44.49	49.89	59.56	74.00	-14.44	Horizontal
9695.000	8.58	50.11	42.14	48.27	64.82	74.00	-9.18	Horizontal

Average Measurement

Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	polarization
2400.000	4.97	40.10	44.75	36.26	36.58	54.00	-17.42	Vertical
2439.000	5.03	39.97	44.77	36.37	36.60	54.00	-17.40	Vertical
1587.500	3.89	42.73	44.72	37.83	39.73	54.00	-14.27	Vertical
4854.000	6.63	44.66	45.41	37.61	43.49	54.00	-10.51	Vertical
7262.750	7.62	46.60	44.46	37.34	47.10	54.00	-6.90	Vertical
9624.500	8.53	49.70	42.20	35.38	51.41	54.00	-2.59	Vertical
2400.000	4.97	40.10	44.75	35.53	35.85	54.00	-18.15	Horizontal
2439.000	5.03	39.97	44.77	35.86	36.09	54.00	-17.91	Horizontal
1505.250	3.76	43.07	44.73	35.94	38.04	54.00	-15.96	Horizontal
4854.000	6.63	44.66	45.41	35.89	41.77	54.00	-12.23	Horizontal
7262.750	7.62	46.60	44.46	35.55	45.31	54.00	-8.69	Horizontal
9659.750	8.55	49.90	42.17	32.27	48.55	54.00	-5.45	Horizontal

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



For EUT communicating with 802.11g Mode(2.437GHz)

Peak Measurement

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2400.000	4.97	40.10	44.75	51.31	51.63	74.00	-22.37	Vertical
2483.500	5.08	39.88	44.77	56.63	56.82	74.00	-17.18	Vertical
1963.500	4.42	41.22	44.66	57.42	58.40	74.00	-15.60	Vertical
4854.000	6.63	44.66	45.41	49.10	54.98	74.00	-19.02	Vertical
7262.750	7.62	46.60	44.46	47.57	57.33	74.00	-16.67	Vertical
9659.750	8.55	49.90	42.17	43.91	60.19	74.00	-13.81	Vertical
2400.000	4.97	40.10	44.75	48.75	49.07	74.00	-24.93	Horizontal
2483.500	5.08	39.88	44.77	53.90	54.09	74.00	-19.91	Horizontal
1963.500	4.42	41.22	44.66	61.86	62.84	74.00	-11.16	Horizontal
4865.750	6.63	44.66	45.41	48.25	54.13	74.00	-19.87	Horizontal
7215.750	7.63	46.53	44.49	46.71	56.38	74.00	-17.62	Horizontal
9695.000	8.58	50.11	42.14	44.23	60.78	74.00	-13.22	Horizontal

Average Measurement

Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	polarization
2400.000	4.97	40.10	44.75	35.36	35.68	54.00	-18.32	Vertical
2483.500	5.08	39.88	44.77	35.48	35.67	54.00	-18.33	Vertical
1528.750	3.79	43.00	44.73	35.95	38.01	54.00	-15.99	Vertical
4865.750	6.63	44.66	45.41	35.94	41.82	54.00	-12.18	Vertical
7239.250	7.62	46.57	44.48	35.59	45.30	54.00	-8.70	Vertical
9659.750	8.55	49.90	42.17	32.27	48.55	54.00	-5.45	Vertical
2400.000	4.97	40.10	44.75	35.47	35.79	54.00	-18.21	Horizontal
2483.500	5.08	39.88	44.77	35.68	35.87	54.00	-18.13	Horizontal
1517.000	3.76	43.07	44.73	35.92	38.02	54.00	-15.98	Horizontal
4865.750	6.63	44.66	45.41	35.92	41.80	54.00	-12.20	Horizontal
7239.250	7.62	46.57	44.48	35.58	45.29	54.00	-8.71	Horizontal
9695.000	8.58	50.11	42.14	32.20	48.75	54.00	-5.25	Horizontal

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



For EUT communicating with 802.11g Mode(2.462GHz)

Peak Measurement

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2483.500	5.08	39.88	44.77	50.70	50.89	74.00	-23.11	Vertical
2500.000	5.10	39.84	44.78	56.92	57.08	74.00	-16.92	Vertical
1963.500	4.42	41.22	44.66	62.14	63.12	74.00	-10.88	Vertical
4865.750	6.63	44.66	45.41	47.84	53.72	74.00	-20.28	Vertical
7239.250	7.62	46.57	44.48	47.17	56.88	74.00	-17.12	Vertical
9695.000	8.58	50.11	42.14	44.08	60.63	74.00	-13.37	Vertical
2483.500	5.08	39.88	44.77	53.61	53.80	74.00	-20.20	Horizontal
2500.000	5.10	39.84	44.78	53.14	53.30	74.00	-20.70	Horizontal
1963.500	4.42	41.22	44.66	63.00	63.98	74.00	-10.02	Horizontal
4865.750	6.63	44.66	45.41	48.89	54.77	74.00	-19.23	Horizontal
7262.750	7.62	46.60	44.46	48.67	58.43	74.00	-15.57	Horizontal
9695.000	8.58	50.11	42.14	44.35	60.90	74.00	-13.10	Horizontal

Average Measurement

Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	polarization
2483.500	5.08	39.88	44.77	36.11	36.30	54.00	-17.70	Vertical
2500.000	5.10	39.84	44.78	35.89	36.05	54.00	-17.95	Vertical
1705.000	4.03	42.32	44.70	35.98	37.63	54.00	-16.37	Vertical
4865.750	6.63	44.66	45.41	35.96	41.84	54.00	-12.16	Vertical
7286.250	7.60	46.67	44.42	35.57	45.42	54.00	-8.58	Vertical
9695.000	8.58	50.11	42.14	32.28	48.83	54.00	-5.17	Vertical
2483.500	5.08	39.88	44.77	35.96	36.15	54.00	-17.85	Horizontal
2500.000	5.10	39.84	44.78	35.87	36.03	54.00	-17.97	Horizontal
1646.250	3.96	42.52	44.71	35.99	37.76	54.00	-16.24	Horizontal
4854.000	6.63	44.66	45.41	35.91	41.79	54.00	-12.21	Horizontal
7239.250	7.62	46.57	44.48	35.58	45.29	54.00	-8.71	Horizontal
9624.500	8.53	49.70	42.20	32.34	48.37	54.00	-5.63	Horizontal

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



Remark:

Section 15.205 Restricted bands of operation.

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41			

TEST RESULTS: The unit does meet the FCC requirements.

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



5.3.3 Occupied Bandwidth

Test Requirement:	FCC 15.247(a2)
Test Method:	ANSI C63.4:2003 and KDB558074
Select test mode:	802.11 b 1Mbps & 802.11g 6Mbps
Requirements:	15.247 (a2) For direct sequence systems, the minimum 6 dB bandwidth shall be at least 500 kHz.

Pre-Scan has been conducted to determine the worst-case mode from all possible Combinations between available modulations, data rates (802.11b 1/2/5.5/11Mbps and 802.11g 6/9/12/18/24/36/48/54Mbps) and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.
802.11b 1Mbps and 802.11g 6Mbps

Equipment Mode	Spectrum Analyzer
Detector Function	Peak Mode
RBW	100KHz for 802.11b and 802.11g
VBW	300KHz for 802.11b and 802.11g

Method of measurement: The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer. The 6 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6 dB. Analyzer and the attached plot were taken. The EUT was setup to ANSI C63.4, 2003, tested to DTS test procedure of Oct 2002 KDB558074 for compliance with FCC 47CFR 15.247 requirements.

Test results:

1. The EUT communicating with 802.11b Mode

CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
2.412	12.28	0.5	Pass
2.437	12.48	0.5	Pass
2.462	11.48	0.5	Pass

2. The EUT communicating with 802.11g Mode

CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
2.412	16.52	0.5	Pass
2.437	16.56	0.5	Pass
2.462	16.44	0.5	Pass

Conclusion: The unit does meet the FCC requirements.

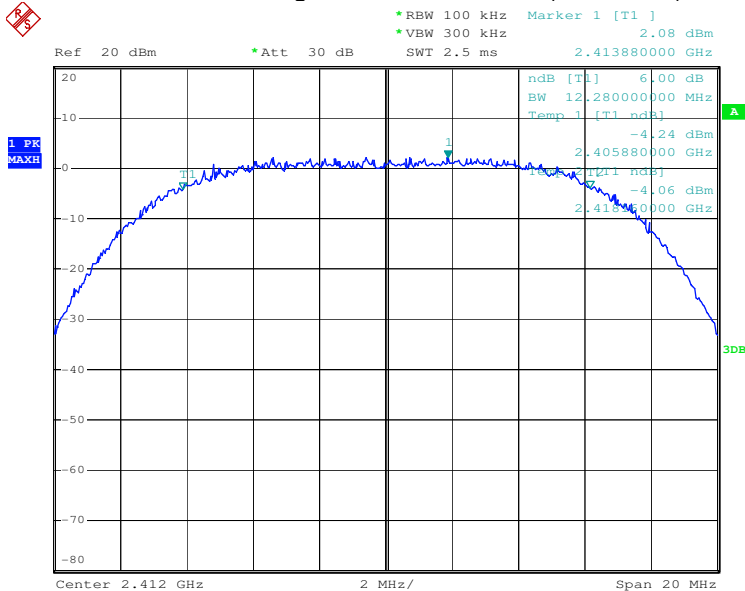
Please refer to the graph as below:

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

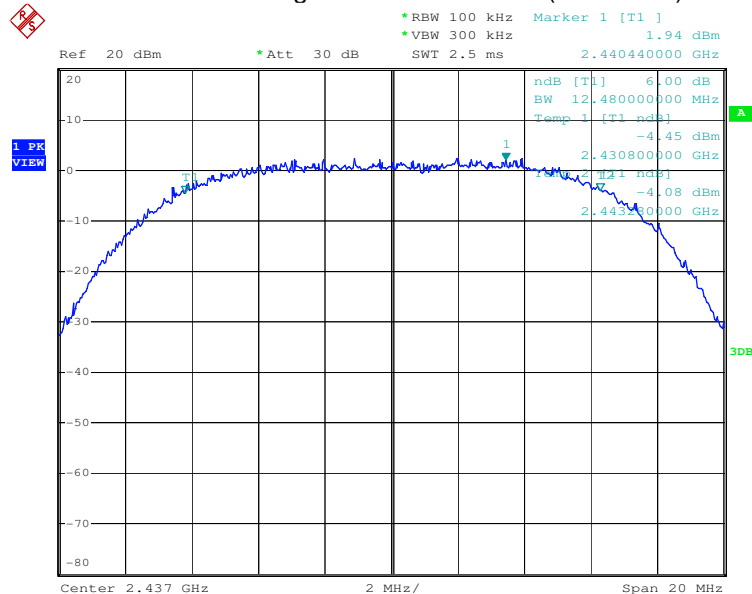


1. For EUT communicating with 802.11b mode (2.412GHz)



Date: 5.JAN.2009 15:52:26

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



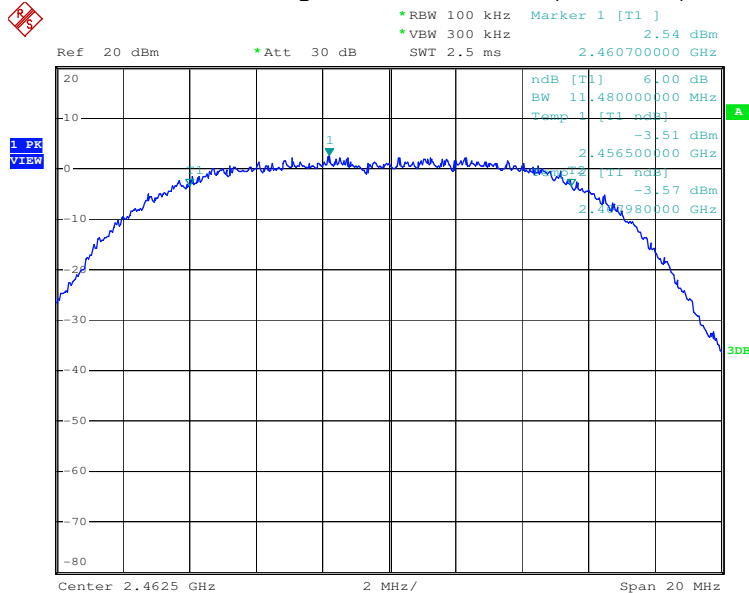
Date: 5.JAN.2009 16:13:09

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

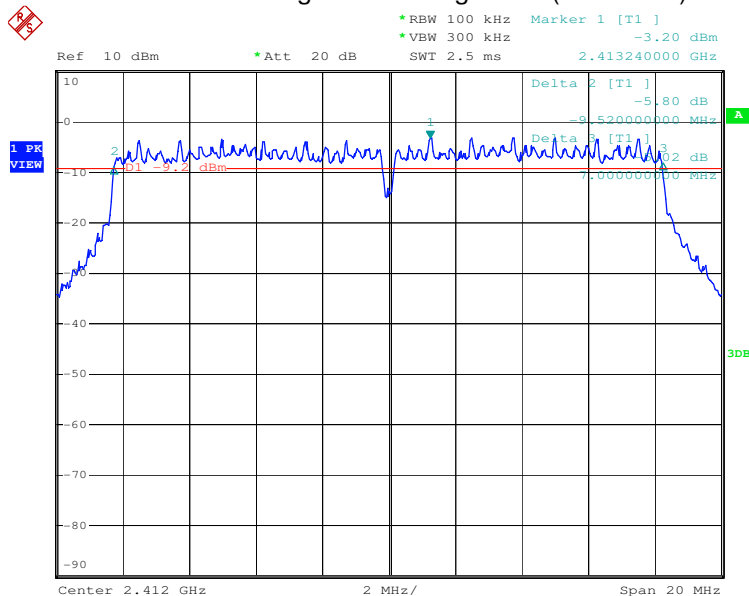


3. For EUT communicating with 802.11b mode (2.462GHz)



Date: 5.JAN.2009 16:34:20

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



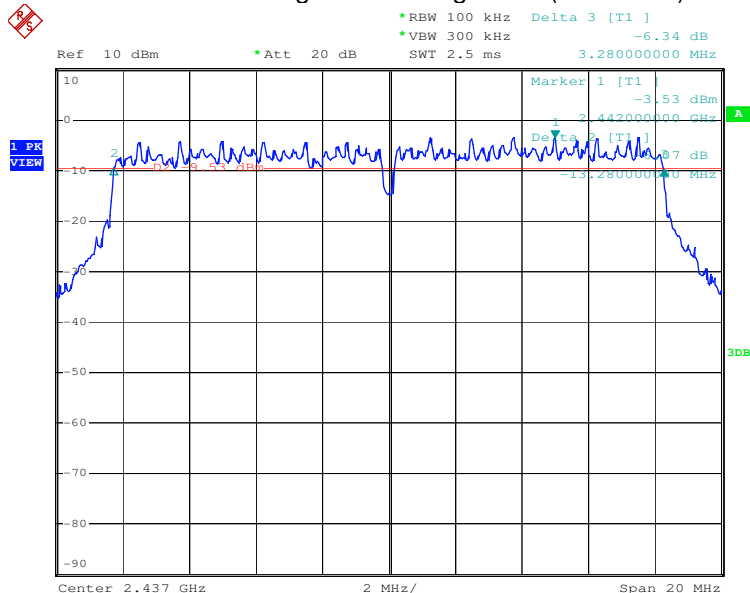
Date: 5.JAN.2009 17:27:28

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

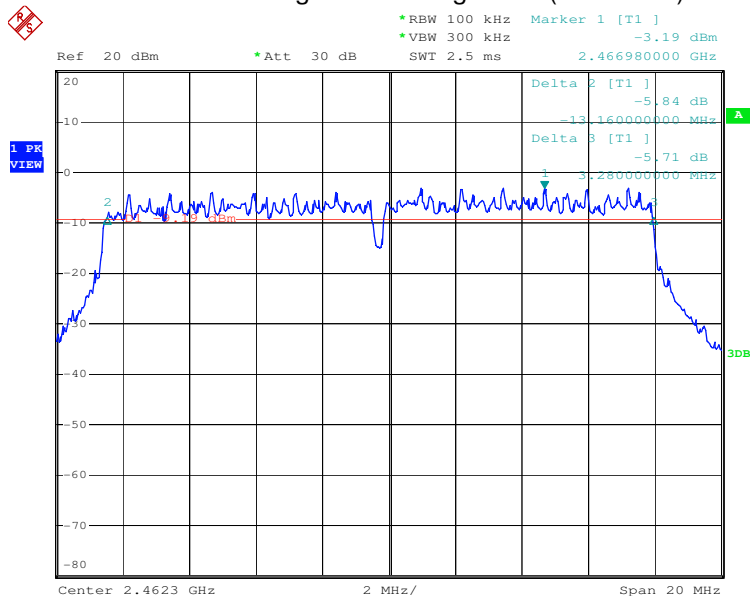


5. For EUT communicating with 802.11g mode (2.437GHz)



Date: 5.JAN.2009 17:43:04

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



Date: 5.JAN.2009 18:02:16

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



5.3.4 Maximum Peak Output Power

Test Requirement: FCC 15.247(b)
Test Method: ANSI C63.4:2003 and KDB558074.
Method of measurement: The EUT was setup to ANSI C63.4, 2003, tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
Test mode: 802.11 b 6/1Mbps & 802.11g 6/54Mbps

Equipment Mode	Spectrum Analyzer
Detector Function	Peak Mode
RBW	1MHz
VBW	3MHz

Test Procedure:

Pre-Scan has been conducted to determine the worst-case mode from all possible Combinations between available modulations, data rates (802.11b 1/2/5.5/11Mbps and 802.11g 6/9/12/18/24/36/48/54Mbps) and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.
802.11b 1Mbps and 802.11g 6Mbps.

Requirements:

Regulation 15.247 (b) The Limit of Maximum Peak Output Power Measurement is 30dBm.

Test Result:

For EUT communicating with 802.11b Mode

Test channel (GHz)	Peak Output Power (dBm)	Limit (dBm)	Margin (dB)
2.410	18.27	30.00	10.15
2.437	18.04	30.00	9.92
2.462	18.30	30.00	10.01

For EUT communicating with 802.11g Mode

Test channel (GHz)	Peak Output Power (dBm)	Limit (dBm)	Margin (dB)
2.410	15.90	30.00	10.62
2.437	15.60	30.00	10.56
2.462	15.67	30.00	10.87

Test result: The unit does meet the FCC requirements.

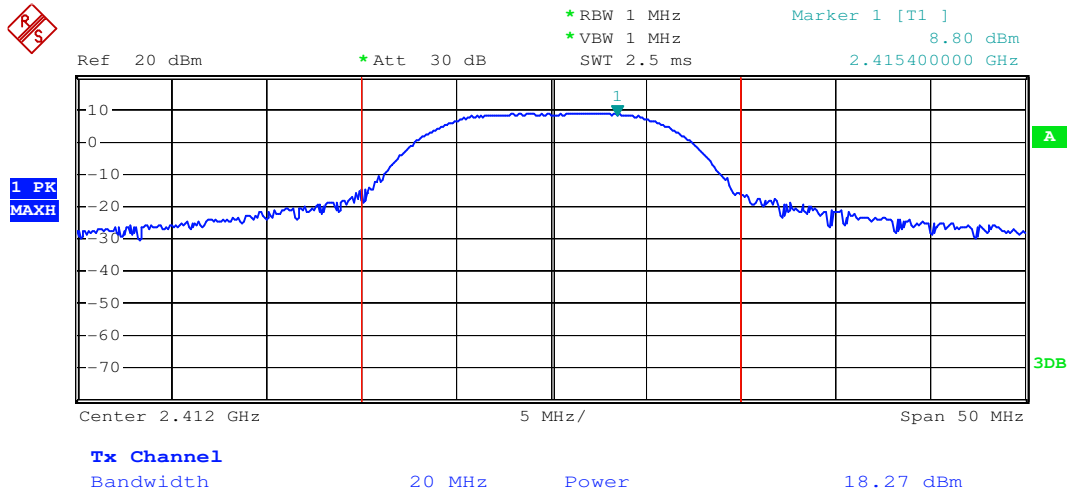
Test result plot as follows:

FCC ID: VSAPX6000I00001

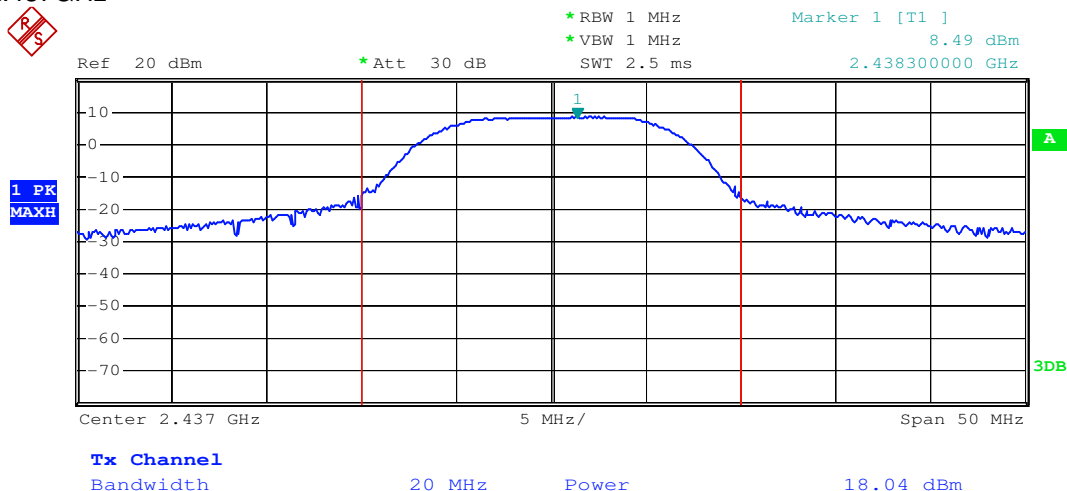
"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

**The EUT communicating with 802.11b Mode**

2.412GHz



2.437GHz



2.462GHz



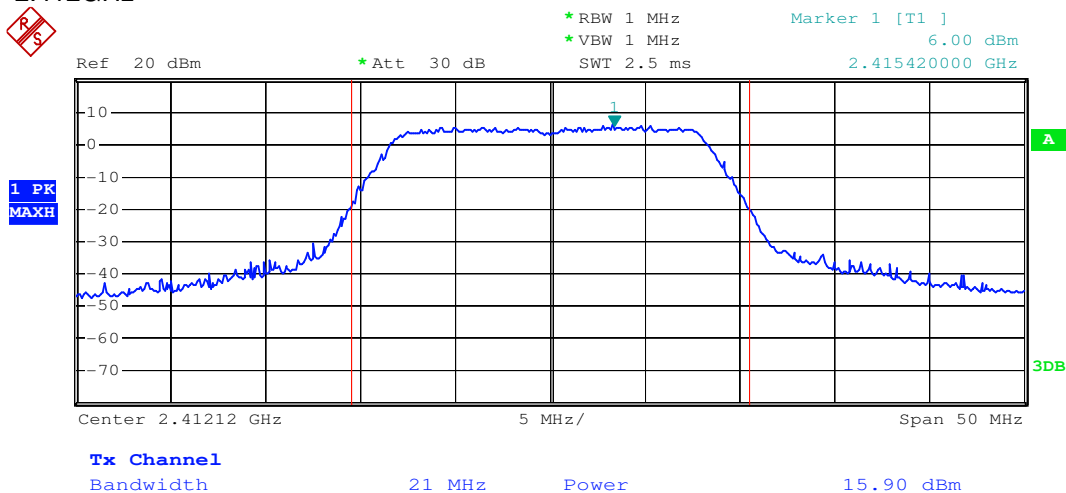
FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

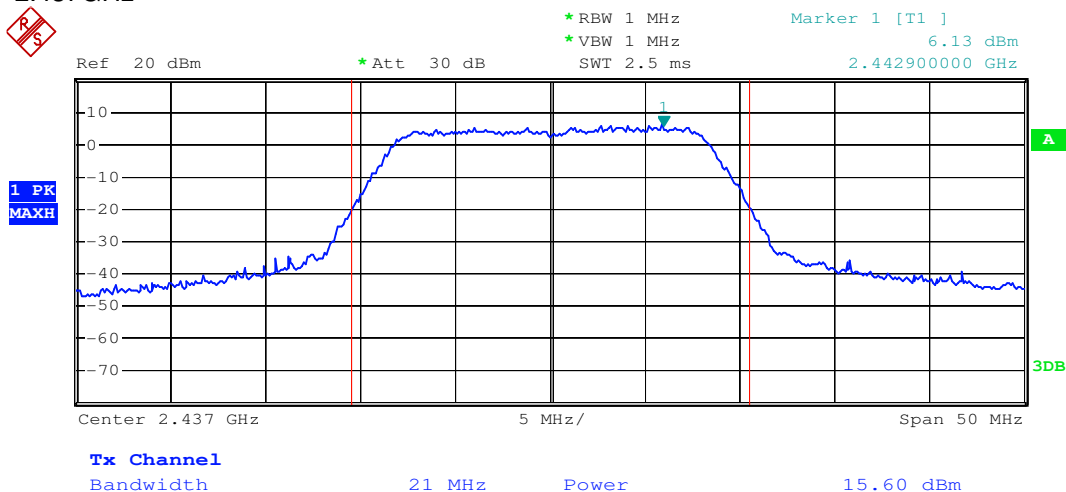


The EUT communicating with 802.11g Mode

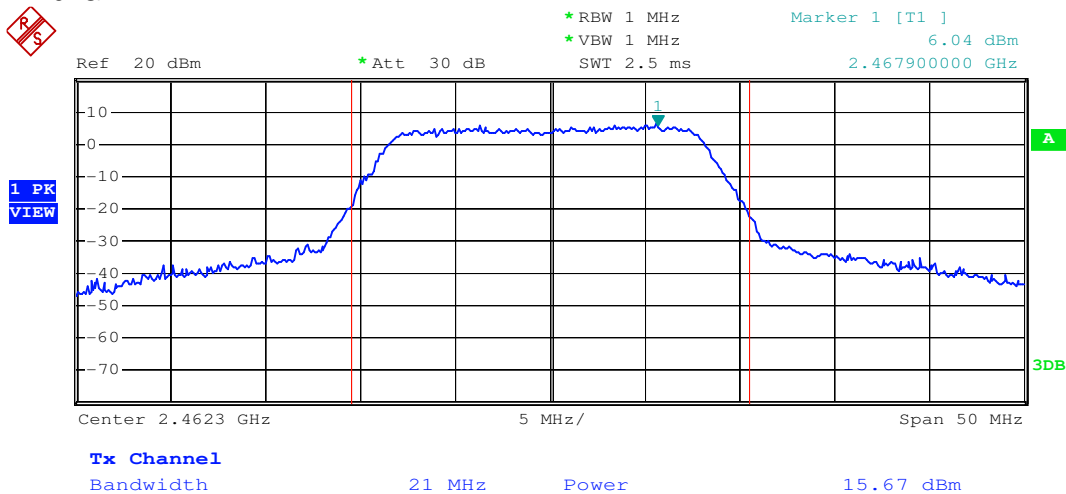
2.412GHz



2.437GHz



2.462GHz

**Conclusion: The EUT meets the requirements of this section.**

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



5.3.5 Band Edges Measurement

Test Requirement: FCC Part15 C Section 15.247(d)
Test Method: ANSI C63.4; FCC Part15 C Section 15.247;
KDB Publication No. 558074 Public Notice DA 00-705 for DSS
Select test mode: 802.11 b 1Mbps & 802.11g 6Mbps
Requirements:

Regulation 15.247 (d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

Test Procedures:

Procedure: The EUT was setup to ANSI C63.4, 2003, tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Equipment Mode	Spectrum Analyzer
Detector Function	Peak Mode
RBW	100KHz
VBW	300KHz

Pre-Scan has been conducted to determine the worst-case mode from all possible Combinations between available modulations, data rates (802.11b 1/2/5.5/11Mbps and 802.11g 6/9/12/18/24/36/48/54Mbps) and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.

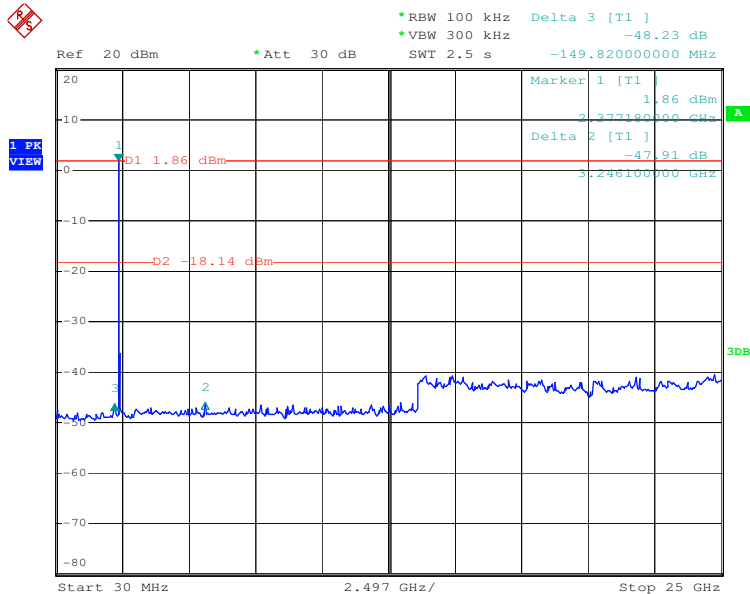
802.11b 1Mbps and 802.11g 6Mbps

Test Result:

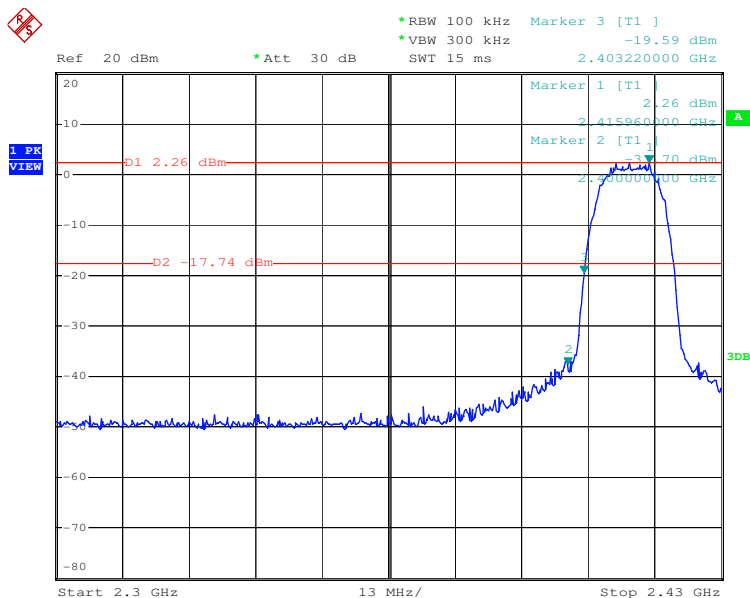
Please refer to the measurement graph and data.



802.11b mode at 2.412GHz



Date: 5.JAN.2009 16:01:49



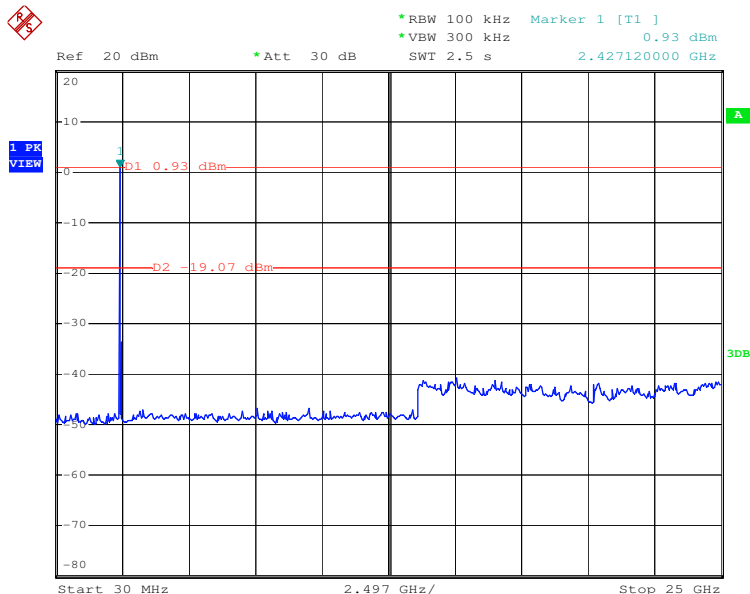
Date: 5.JAN.2009 16:48:55

FCC ID: VSAPX6000I00001

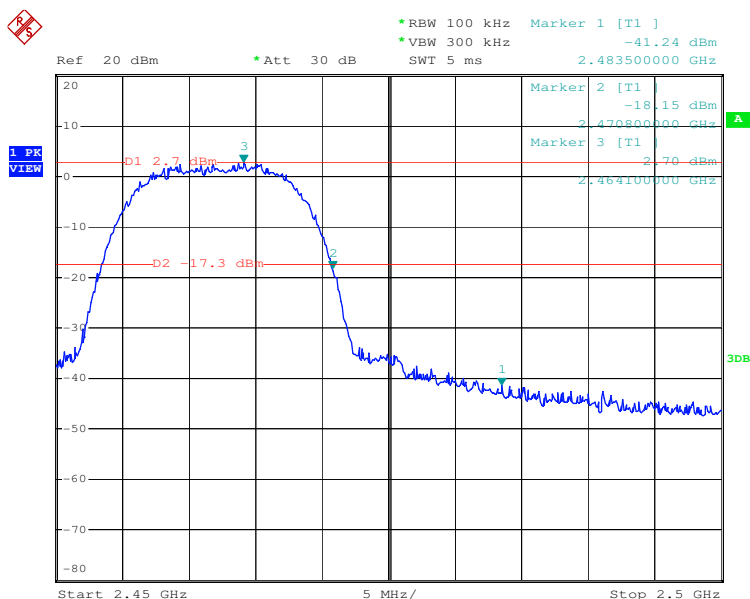
"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



802.11b mode at 2.462 GHz



Date: 5.JAN.2009 16:41:02



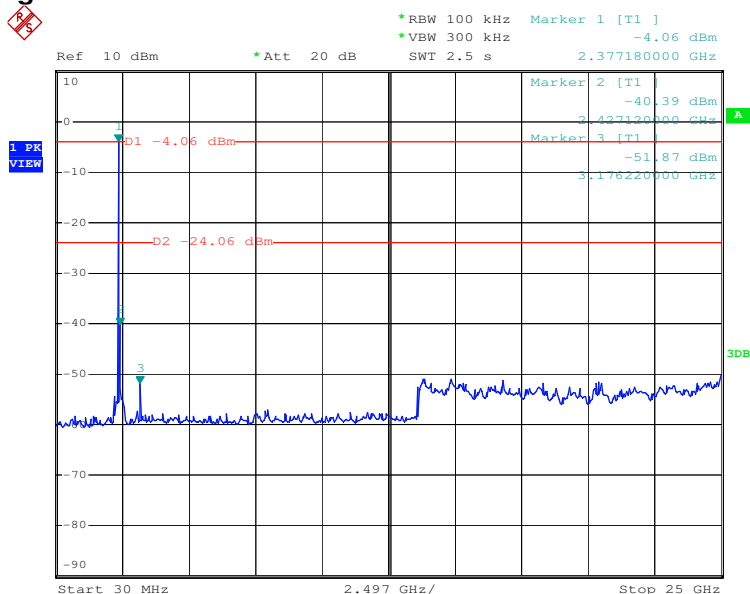
Date: 5.JAN.2009 16:37:57

FCC ID: VSAPX6000I00001

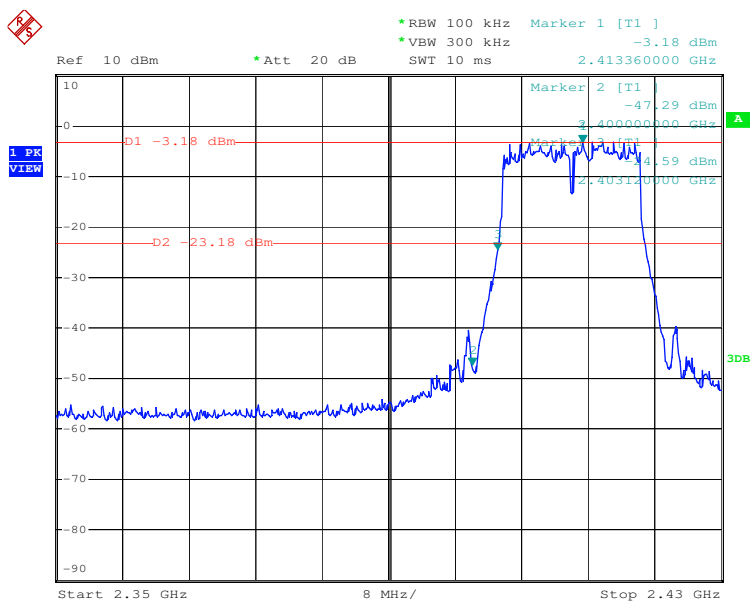
"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



802.11g mode at 2.412GHz



Date: 5.JAN.2009 17:31:59



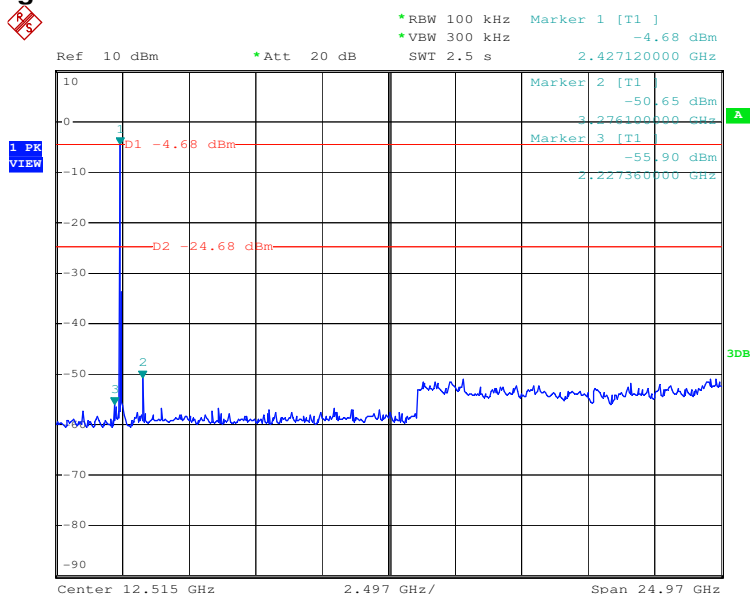
Date: 5.JAN.2009 18:22:13

FCC ID: VSAPX6000I00001

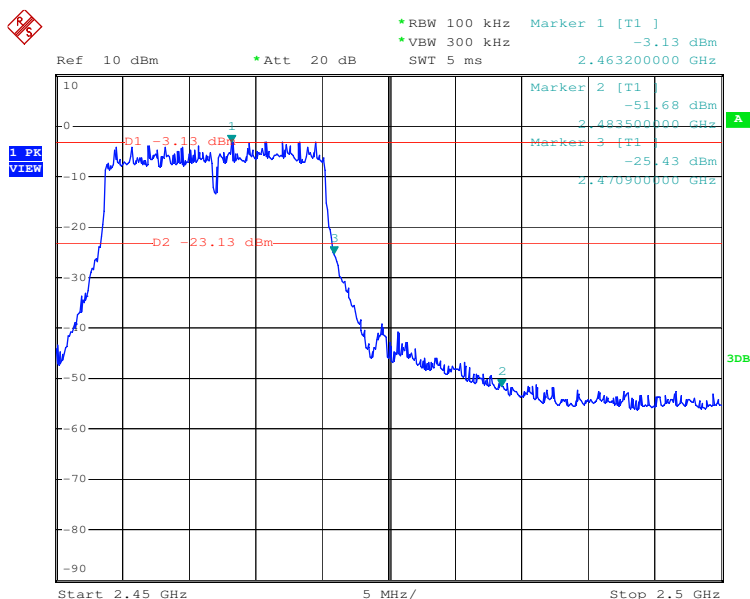
"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



802.11g mode at 2.462GHz



Date: 5.JAN.2009 18:10:09



Date: 5.JAN.2009 18:08:24

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



5.3.6 Power Spectral Density Measurement

Test Requirement: FCC 15.247(d)

Test Method: ANSI C63.4 and KDB Publication No. 558074 Public Notice DA 00-705 for DSS.

Regulation 15.247 (d) for direct sequence systems, the peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission

Test Procedures:

Equipment Mode	Spectrum Analyzer
Detector Function	Peak Mode
RBW	3KHz
VBW	10KHz
Span	300KHz
Sweep Time	100S

Pre-Scan has been conducted to determine the worst-case mode from all possible Combinations between available modulations, data rates (802.11b 1/2/5.5/11Mbps and 802.11g 6/9/12/18/24/36/48/54Mbps) and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.
802.11b 1Mbps and 802.11g 6Mbps

The EUT was set transmitting continuously and force selection of output power level and channel number. We'd observed that the peak levels aren't greater than +8dBm limit.

The EUT was setup to ANSI C63.4, 2003, tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

**Test Result:**

1. For EUT communicating with 802.11b Mode

CHANNEL FREQUENCY (GHz)	RF POWER LEVEL IN 3 KHz BW (dBm)	MAXIMUM Limit (dBm)	PASS/FAIL
2.412	-10.76	8.00	Pass
2.437	-11.77	8.00	Pass
2.462	-11.07	8.00	Pass

2. For EUT communicating with 802.11g Mode

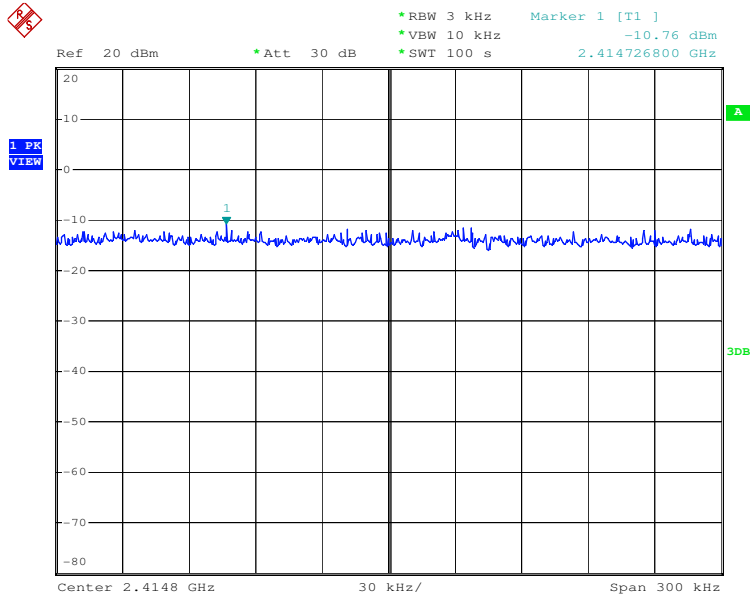
CHANNEL FREQUENCY (GHz)	RF POWER LEVEL IN 3 KHz BW (dBm)	MAXIMUM Limit (dBm)	PASS/FAIL
2.412	-16.97	8.00	Pass
2.437	-17.33	8.00	Pass
2.462	-15.90	8.00	Pass

Conclusion:**The EUT meets the requirements of this section.**

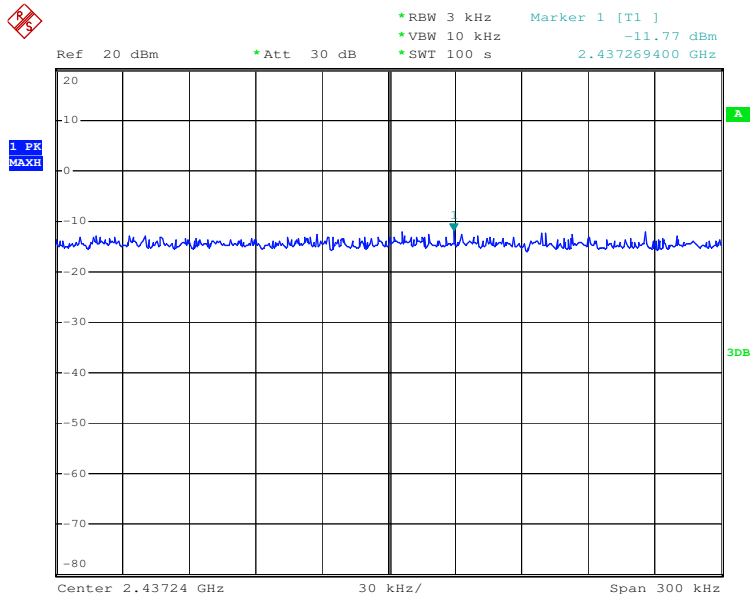
Please refer to the graph and data as below:

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

**Test Result:**
802.11b mode:
2.412GHz

Date: 5.JAN.2009 16:07:41

2.437 GHz

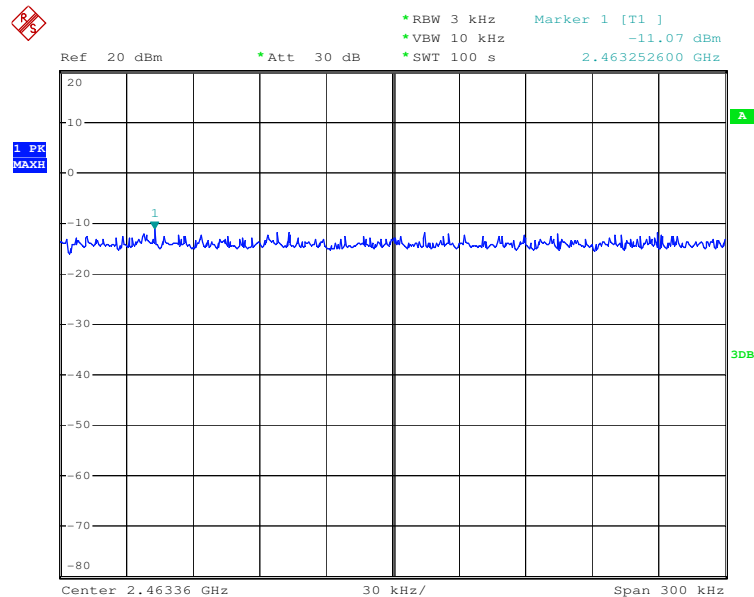
Date: 5.JAN.2009 16:28:16

FCC ID: VSAPX6000I00001

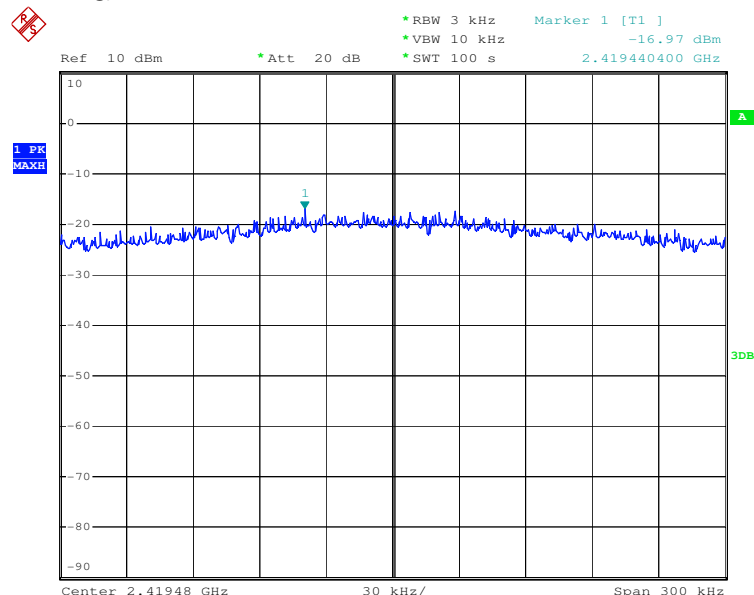
"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



2.462 GHz



Date: 5.JAN.2009 16:45:39

802.11g mode:
2.412 GHz

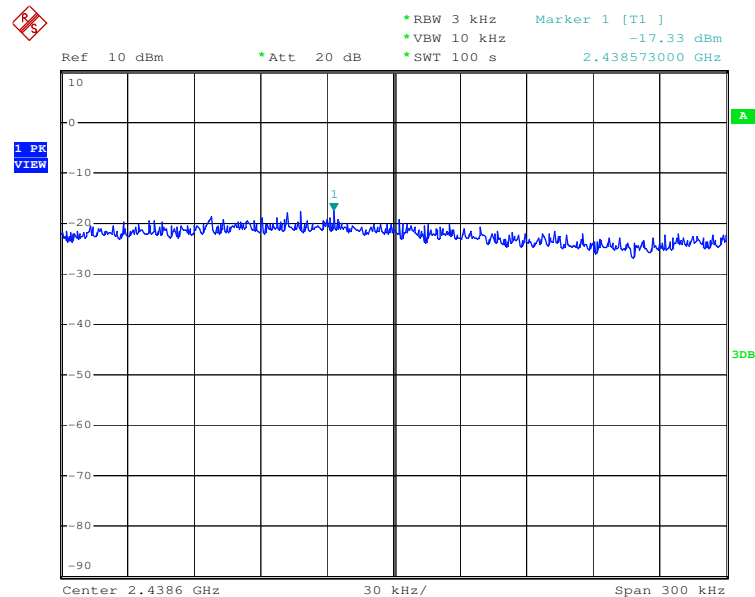
Date: 5.JAN.2009 17:40:35

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

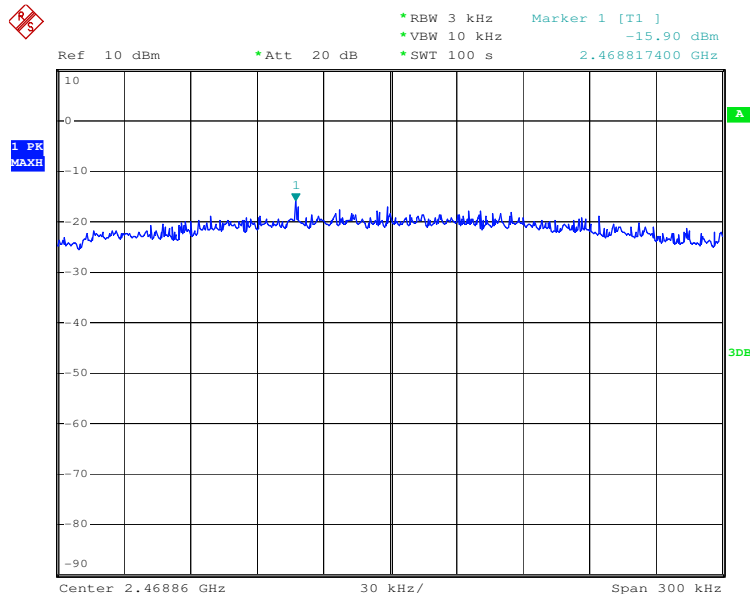


2.437 GHz



Date: 5.JAN.2009 17:58:17

2.462 GHz



Date: 5.JAN.2009 18:16:12

FCC ID: VSAPX6000I00001

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



5.3.7 Antenna Requirement

5.3.7.1 Standard requirement

15.203 requirement:

For intentional device. According to 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.

15.247(c) (1)(i) requirement:

(i) Systems operating in the 2400-2483.5 MHz bands that are used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

5.3.7.2 EUT Antenna

The best case gain of the antenna is 0dBi.