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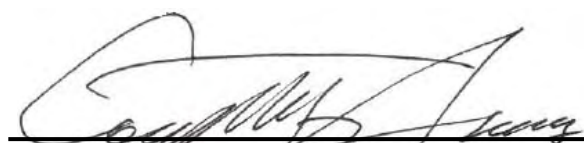
No.140-1, Chang-an St., Bade City, Tao-Yuan County 334, Taiwan (R.O.C.)
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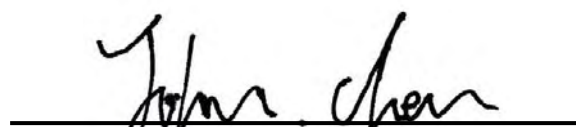
Part 15 C Measurement Report



Report No.	: 0901FR11
Applicant	: Unitech Electronics Co., Ltd.
Product Type	: Fixed Data Collection Terminal
Trade Mark	: unitech
Product Model	: RS700
FCC ID	: HLERS700
Dates of Test	: Dec. 16, 2008 ~ Jan. 05, 2008
Test Specification	: Part 15 Subpart C (15.247)
	PUBLIC NOTICE :DA 00-705 Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems
Location of Test Lab.	: Chang-an Lab.

1. The test operations have to be performed with cautious behavior, the test results are as attached.
2. The test results are under chamber environment of A Test Lab Techno Corp. A Test Lab Techno Corp. does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples.
3. The measurement report has to be written approval of A Test Lab Techno Corp. It may only be reproduced or published in full.


Country Huang 20090304
Measurement Center Manager


John Cheng 20090304
Testing Engineer



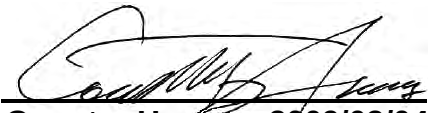
CERTIFICATION

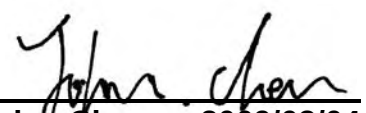
We here by verify that:

The test data, data evaluation, test procedures and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4:2003. All test were conducted by *A Test Lab Techno Corp. No.140-1, Chang-an St., Bade City, Tao-Yuan County 334, Taiwan (R.O.C.)* Also, we attest to the accuracy of each.

We further submit that the energy emitted by the sample EUT tested as described in the report is in compliance with Class B radiated and conducted emission limit of FCC Rules Part 15 Subpart C (15.247).

EUT : Fixed Data Collection Terminal
Applicant : Unitech Electronics Co., Ltd.
5F, No136, Lane 235, Pao-Chiao Rd., Hsin-Tien City, Taipei Hsien,
Taiwan 231, Taiwan
Trade Mark : unitech
Model No : RS700
FCC ID : HLERS700

Approved by : 
Country Huang 2009/03/04

Prepared by : 
John Cheng 2009/03/04

A Test Lab Techno Corp.

*No.140-1, Chang-an St., Bade City, Tao-Yuan County 334, Taiwan (R.O.C.)
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1. GENERAL

1.1 Description of Equipment under Test (EUT)

Applicant :

Unitech Electronics Co., Ltd.

5F, No136, Lane 235, Pao-Chiao Rd., Hsin-Tien City, Taipei Hsien, Taiwan 231, Taiwan

Manufacturer : EMMT SYSTEMS CORPORATION
Manufacturer Address : TAICHUNG EXPORT PROCESSING ZONE P.O BOX 1-45,
TAN-TZU TAICHUNG. NO.16-1 NAN-ER ROAD, TAN-TZU,
TAICHUNG HSIEN, TAIWAN R.O.C
Product Type : Fixed Data Collection Terminal
Trade Name : unitech
Model Name : RS700
FCC ID : HLEERS700
Input Rating : 12Vdc / 3 A (AC Adapter)
Frequency of Channel : See Table 1
Type of Modulation : Direct Sequence Spread Spectrum
Type of Antenna : External Antenna
Antenna Gain : 2.2 dBi
Hardware : N/A
Software : N/A

During testing the EUT was operated at Tx or Rx mode for each emission measured. This was done in order to ensure that maximum emission levels were attained.

802.11b/g Mode	
CH	Frequency
1	2412
2	2417
3	2422
4	2427
5	2432
6	2437
7	2442
8	2447
9	2452
10	2457
11	2462

Table 1. WLAN Frequency of Each Channel (Working Frequency)



1.2 Introduction

The following measurement report is submitted on behalf of **Unitech Electronics Co., Ltd.** In support of a Class B Digital Device certification in accordance with Part2 Subpart J and Part 15 Subpart A and B&C of the Commission's and Regulations.

1.3 Summary of Tests

47 CFR Part 15 Subpart C			
Reference	Test	Results	Note
15.107	AC Power Conducted Emission	PASS	
15.247(c)	Transmitter Radiated Emissions	PASS	
15.247(b)	Max. Output Power	PASS	
15.247(a)(2)	6dB RF Bandwidth	PASS	
15.247(d)	Max. Power Density	PASS	
15.247(c)	Out of Band Conducted Spurious Emission	PASS	
15.247(c)	Band Edge Measurement	PASS	
15.203	Antenna Requirement	PASS	

1.4 Description of Support Equipment

Describe	Manufacturer	Model	Serial No.	FCC ID
Notebook	Dell	PP04X	CN-0XM006-48643 -837-0665	EZKWM3945ABG

1.5 Configuration of System under Test

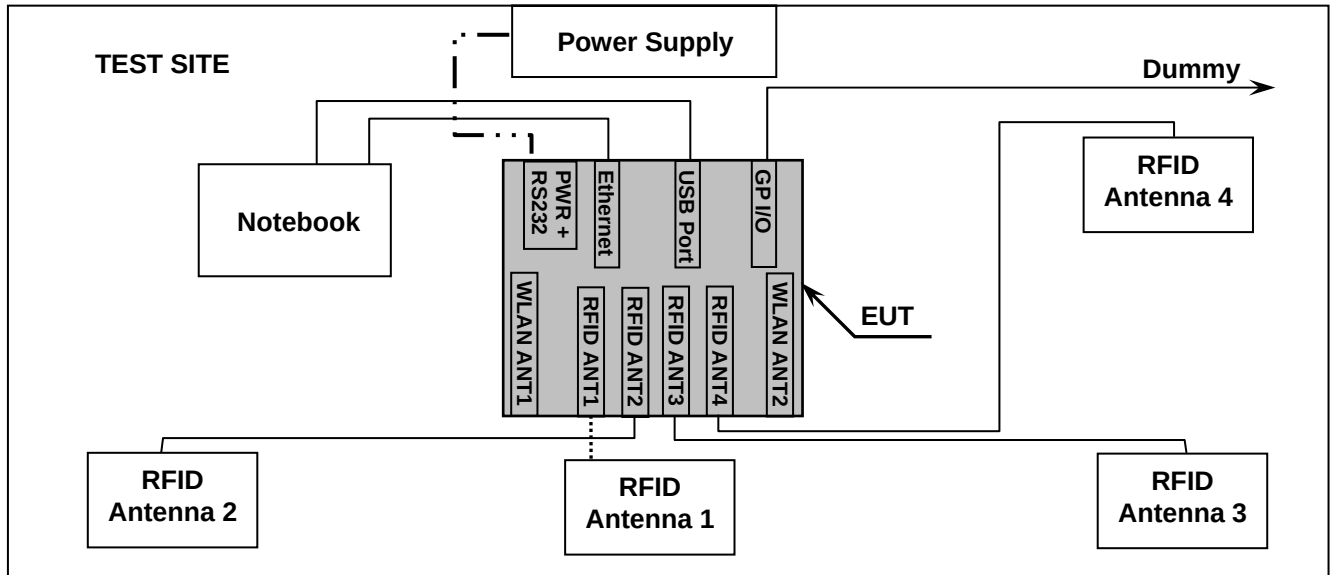


Figure 1. Configuration of System Under Test for PC USB Link

During testing the EUT (Fixed Data Collection Terminal)'s power port connected to the AC power. The EUT (Fixed Data Collection Terminal)'s USB port and Ethernet port connected to the Notebook. The EUT (Fixed Data Collection Terminal)'s RFID antenna port 1 & 2 & 3 and 4 connected to the RFID Antenna.

1.6 Test Procedure

All measurements contained in this report were performed according to the techniques described in Measurement procedure ANSI C63.4-2003 "Measurement of un-Intentional Radiators."

1.7 General Test Condition

The conditions under which the EUT operates were varied to determine their effect on the equipment's emission characteristics. The final configuration of the test system and the mode of operation used during these tests were chosen as that which produced the highest emission levels. However, only those conditions which the EUT was considered likely to encounter in normal use were investigated. The systems radiated and conducted emissions were investigated while the computer alternately transferred data to the EUT as well as to the monitor and printer. Using a test program which sent a continuous data and transferred data to and from the EUT was proven to worst case emissions. The system's physical layout and cabling was randomly arranged to ensure that maximum emission levels were attained.



2. Conducted Emissions Requirements

2.1 General & Setup:

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.

The power line conducted emission measurements were performed in a shielded enclosure. The EUT was assembled on a wooden table which is 80 centimeters high, was placed 40 centimeters from the back wall and at least 1 meter from the sidewall.

Power was fed to the EUT from the public utility power grid through a line filter and EMCO Model 3162/2 SH Line Impedance Stabilization Networks (LISN). The LISN housing, measuring instrumentation case, ground plane, etc., were electrically bonded together at the same RF potential. The Spectrum analyzer was connected to the AC line through an isolation transformer. The 50-ohm output of the LISN was connected to the spectrum analyzer directly. Conducted emission levels were in the CISPR quasi-peak detection mode. The analyzer's 6 dB bandwidth was set to 9 KHz. No post-detector video filter was used.

The spectrum was scanned from 150 KHz to 30 MHz. The physical arrangement of the test system and associated cabling was varied (within the scope of arrangements likely to be encountered in actual use) to determine the effect on the unit's emanations in amplitude and frequency. All spurious emission frequencies were observed. The highest emission amplitudes relative to the appropriate limit were measured and have been recorded in paragraph 2.6.

2.2 Test Equipment List:

Describe	Manufacturer	Model	Serial Number	Calibration	
				Cal. Date	Due Date
Spectrum Analyzer	Advantest	R3132	160300103	Mar. 06, 2008	Mar. 06, 2009
Test Receiver	R&S	ESCI	100367	Jun. 05, 2008	Jun. 05, 2009
LISN	EMCO	3816/2 SH	00060110	Jun. 04, 2008	Jun. 04, 2009
LISN	EMCO	3816/2 SH	00060111	Jun. 30, 2008	Jun. 13, 2009
Transient Limiter	ELECTRO-METRICS	EM-7600	777	Jun. 26, 2008	Jun. 26, 2009

2.3 Test Configuration:



Figure 2. Front View of the Test Configuration



Figure 3. Rear View of the Test Configuration



2.4 Test condition:

EUT tested in accordance with the specifications given by the Manufacturer, and exercised in the most unfavorable manner.

2.5 Conducted Emissions Limits:

Frequency range (MHz)	Limits (dBuV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5.0	56	46
5.0 to 30	60	50

2.6 Measurement Data of Conducted Emissions:

2.6.1 Conducted Emissions (Subpart C)

The following table show a summary of the highest emissions of power line conducted emissions to the HOT and NATURAL conductor of the EUT power.

Applicant : Unitech Electronics Co., Ltd.
Model No : RS700
EUT : Fixed Data Collection Terminal
Test Mode : IDLE Mode
Test Date : 12/30/2008

Please refer to next pager of detail testing data.

Notes:

1. L1: One end & Ground L2: The other end & Ground
2. Height of table on which the EUT was placed: 0.8 m.
3. The Quasi-Peak Value have already met the Average Value Limit showed on above limits.
4. The above test results are obtained under the normal condition.



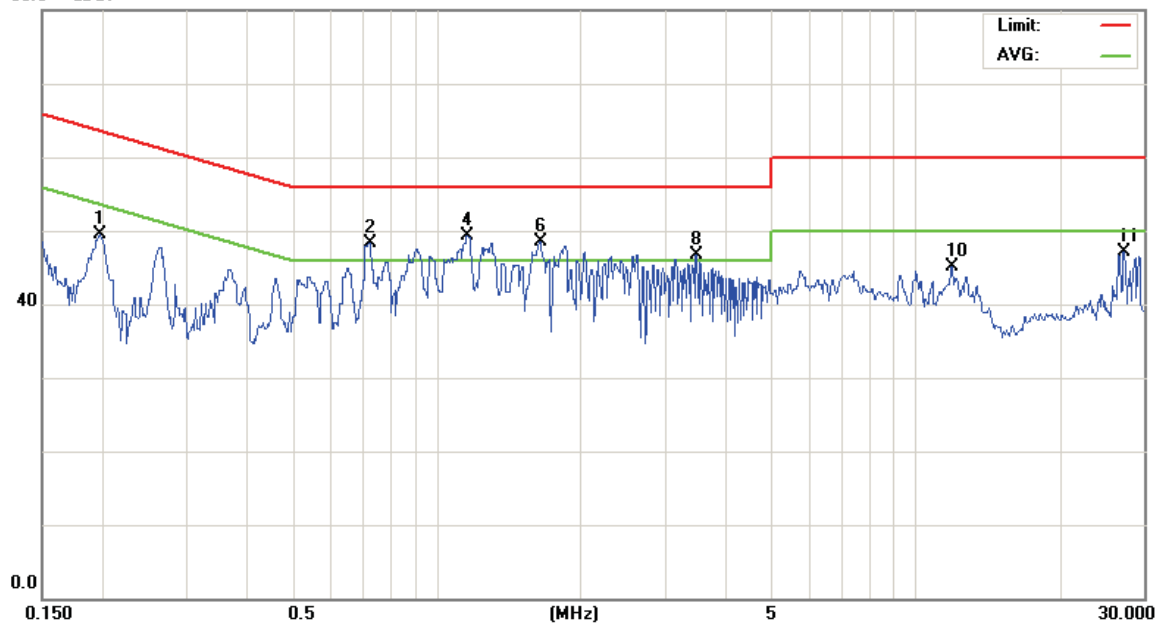
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Data :#1

Date: 2008-12-30

Time: 下午 10:11:23

80.0 dBuV



Site site#1

Phase: **L1**

Temperature: 26 °C

Limit: CISPR22 Class B Conduction(QP)

Power: AC 110V/60Hz

Humidity: 55 %

EUT:

M/N: 08-0128-E

Mode: IDLE

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1975	39.73	9.74	49.47	63.71	-14.24	peak	
2		0.7247	38.46	9.80	48.26	56.00	-7.74	peak	
3		0.7247	31.31	9.80	41.11	46.00	-4.89	AVG	
4		1.1569	39.55	9.80	49.35	56.00	-6.65	peak	
5	*	1.1569	31.49	9.80	41.29	46.00	-4.71	AVG	
6		1.6429	38.62	9.83	48.45	56.00	-7.55	peak	
7		1.6429	30.52	9.83	40.35	46.00	-5.65	AVG	
8		3.4788	36.80	9.95	46.75	56.00	-9.25	peak	
9		3.4788	25.63	9.95	35.58	46.00	-10.42	AVG	
10		11.9000	34.97	10.13	45.10	60.00	-14.90	peak	
11		27.1500	36.71	10.36	47.07	60.00	-12.93	peak	

*:Maximum data x:Over limit !:over margin

●Reference Only



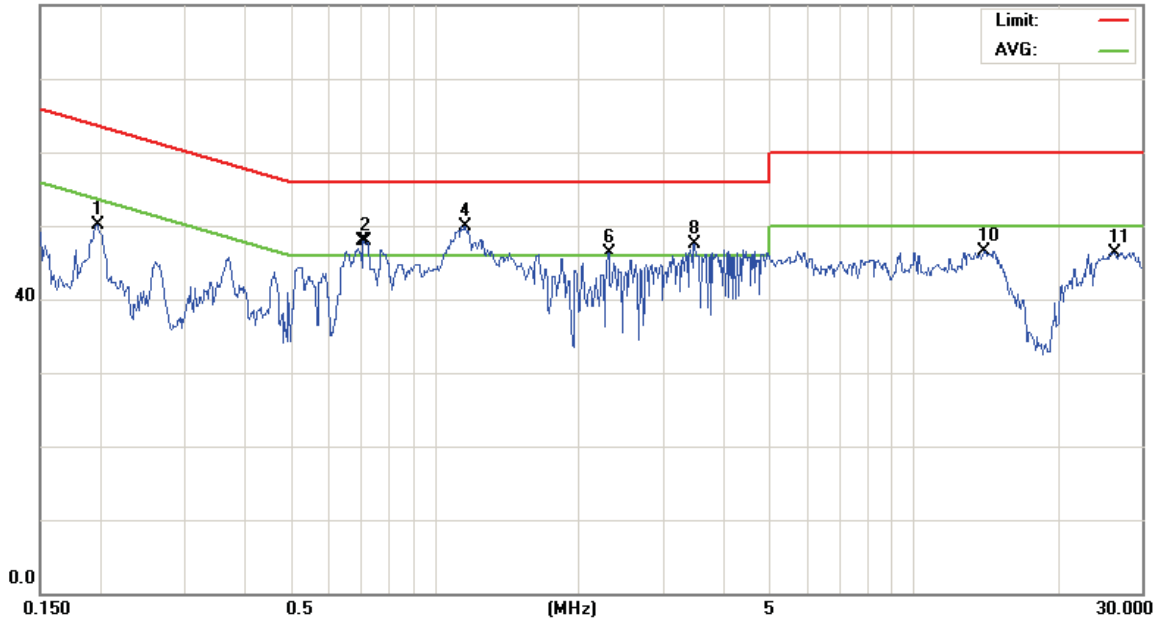
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Data :#2

Date: 2008-12-30

Time: 下午 10:32:45

80.0 dBuV



Site site#1

Phase: **L2**

Temperature: 26 °C

Limit: CISPR22 Class B Conduction(QP)

Power: AC 110V/60Hz

Humidity: 55 %

EUT:

M/N: 08-0128-E

Mode: IDLE

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1968	40.27	9.74	50.01	63.74	-13.73	peak	
2		0.7157	38.11	9.80	47.91	56.00	-8.09	peak	
3		0.7157	32.07	9.80	41.87	46.00	-4.13	AVG	
4		1.1569	40.16	9.80	49.96	56.00	-6.04	peak	
5	*	1.1569	32.16	9.80	41.96	46.00	-4.04	AVG	
6		2.3000	36.48	9.86	46.34	56.00	-9.66	peak	
7		2.3000	29.86	9.86	39.72	46.00	-6.28	AVG	
8		3.4788	37.49	9.95	47.44	56.00	-8.56	peak	
9		3.4788	28.56	9.95	38.51	46.00	-7.49	AVG	
10		14.0000	36.32	10.20	46.52	60.00	-13.48	peak	
11		26.1500	36.03	10.31	46.34	60.00	-13.66	peak	

*:Maximum data x:Over limit !:over margin

●Reference Only



2.6.2 Conducted Emissions (Subpart C)

The following table show a summary of the highest emissions of power line conducted emissions to the HOT and NATURAL conductor of the EUT power.

Applicant	: Unitech Electronics Co., Ltd.
Model No	: RS700
EUT	: Fixed Data Collection Terminal
Test Mode	: 802.11b Link Mode
Test Date	: 12/30/2008

Please refer to next pager of detail testing data.

Notes:

1. L1: One end & Ground L2: The other end & Ground
2. Height of table on which the EUT was placed: 0.8 m.
3. The Quasi-Peak Value have already met the Average Value Limit showed on above limits.
4. The above test results are obtained under the normal condition.



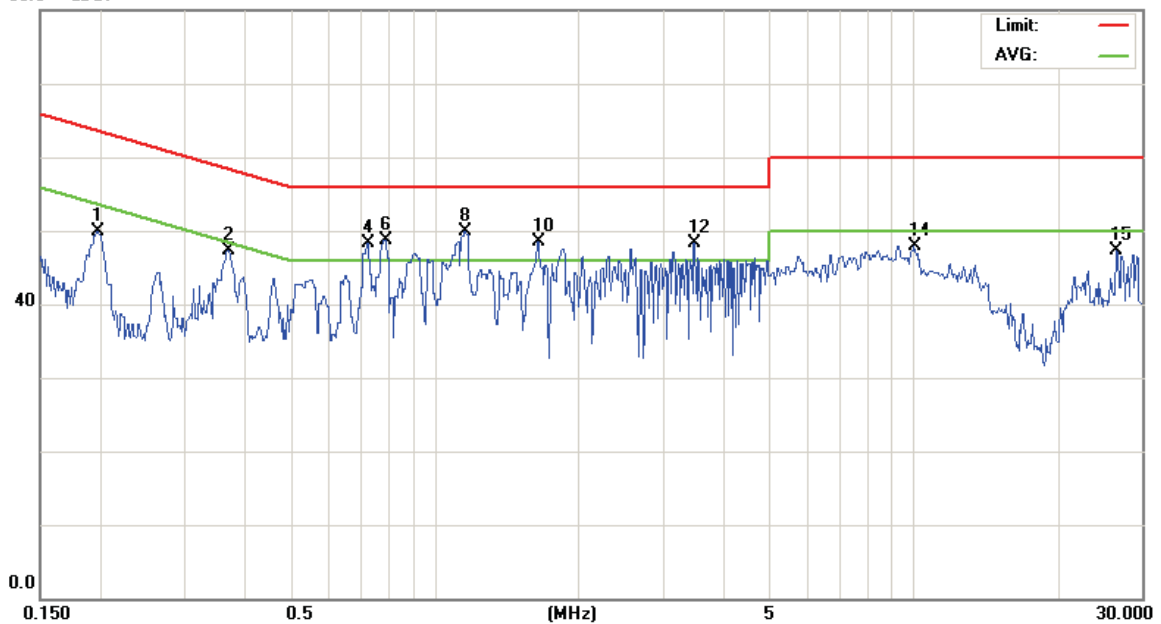
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Data :#1

Date: 2008-12-30

Time: 下午 09:08:13

80.0 dBuV



Site site#1

Phase: **L1**

Temperature: 26 °C

Limit: CISPR22 Class B Conduction(QP)

Power: AC 110V/60Hz

Humidity: 55 %

EUT:

M/N: 08-0128-E

Mode: 11b

Note: ch01

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1975	40.23	9.74	49.97	63.71	-13.74	peak	
2		0.3704	37.45	9.78	47.23	58.49	-11.26	peak	
3		0.3704	30.38	9.78	40.16	48.49	-8.33	AVG	
4		0.7247	38.46	9.80	48.26	56.00	-7.74	peak	
5	*	0.7247	32.73	9.80	42.53	46.00	-3.47	AVG	
6		0.7880	38.88	9.80	48.68	56.00	-7.32	peak	
7		0.7880	31.98	9.80	41.78	46.00	-4.22	AVG	
8		1.1569	40.05	9.80	49.85	56.00	-6.15	peak	
9		1.1569	25.49	9.80	35.29	46.00	-10.71	AVG	
10		1.6429	38.62	9.83	48.45	56.00	-7.55	peak	
11		1.6429	24.98	9.83	34.81	46.00	-11.19	AVG	
12		3.4788	38.30	9.95	48.25	56.00	-7.75	peak	
13		3.4788	22.38	9.95	32.33	46.00	-13.67	AVG	

*:Maximum data x:Over limit !:over margin

●Reference Only



Site site#1	Phase:	L1	Temperature:	26 °C
Limit: CISPR22 Class B Conduction(QP)	Power:	AC 110V/60Hz	Humidity:	55 %
EUT:				
M/N: 08-0128-E				
Mode: 11b				
Note: ch01				

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector Comment
14		10.0500	37.85	10.08	47.93	60.00	-12.07	peak
15		26.4500	37.07	10.18	47.25	60.00	-12.75	peak

*:Maximum data x:Over limit !:over margin

- Reference Only



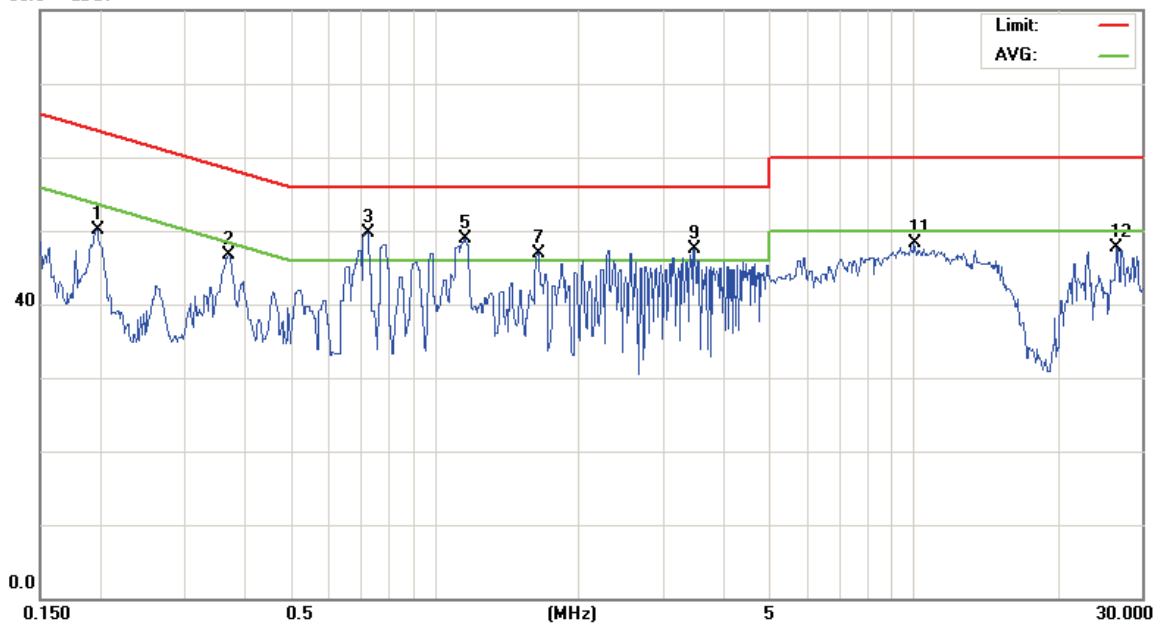
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Data :#2

Date: 2008-12-30

Time: 下午 09:55:21

80.0 dBuV



Site site#1

Phase: **L2**

Temperature: 26 °C

Limit: CISPR22 Class B Conduction(QP)

Power: AC 110V/60Hz

Humidity: 55 %

EUT:

M/N: 08-0128-E

Mode: 11b

Note: ch01

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1968	40.27	9.74	50.01	63.74	-13.73	peak	
2		0.3709	36.98	9.78	46.76	58.48	-11.72	peak	
3		0.7247	39.86	9.80	49.66	56.00	-6.34	peak	
4	*	0.7247	33.58	9.80	43.38	46.00	-2.62	AVG	
5		1.1569	39.16	9.80	48.96	56.00	-7.04	peak	
6		1.1569	32.99	9.80	42.79	46.00	-3.21	AVG	
7		1.6429	37.07	9.83	46.90	56.00	-9.10	peak	
8		1.6429	22.93	9.83	32.76	46.00	-13.24	AVG	
9		3.4788	37.49	9.95	47.44	56.00	-8.56	peak	
10		3.4788	20.23	9.95	30.18	46.00	-15.82	AVG	
11		10.0500	38.16	10.08	48.24	60.00	-11.76	peak	
12		26.4500	37.53	10.18	47.71	60.00	-12.29	peak	

*:Maximum data x:Over limit !:over margin

●Reference Only



2.6.3 Conducted Emissions (Subpart C)

The following table show a summary of the highest emissions of power line conducted emissions to the HOT and NATURAL conductor of the EUT power.

Applicant	: Unitech Electronics Co., Ltd.
Model No	: RS700
EUT	: Fixed Data Collection Terminal
Test Mode	: 802.11g Link Mode
Test Date	: 12/30/2008

Please refer to next pager of detail testing data.

Notes:

1. L1: One end & Ground L2: The other end & Ground
2. Height of table on which the EUT was placed: 0.8 m.
3. The Quasi-Peak Value have already met the Average Value Limit showed on above limits.
4. The above test results are obtained under the normal condition.



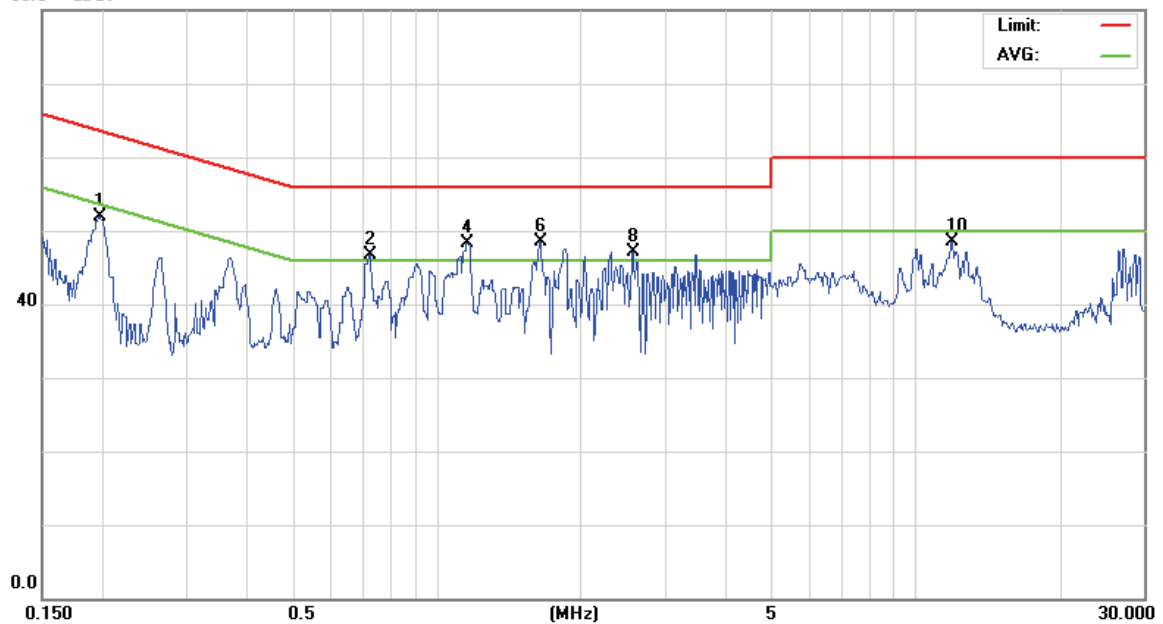
File :RS700(WIFI 11g)

Data :#1

Date: 2008-12-30

Time: 下午 10:11:23

80.0 dBuV



Site site#1

Phase: **L1**

Temperature: 26 °C

Limit: CISPR22 Class B Conduction(QP)

Power: AC 110V/60Hz

Humidity: 55 %

EUT:

M/N: 08-0128-E

Mode: 11g

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1975	42.23	9.74	51.97	63.71	-11.74	peak	
2		0.7247	36.96	9.80	46.76	56.00	-9.24	peak	
3	*	0.7247	32.03	9.80	41.83	46.00	-4.17	AVG	
4		1.1569	38.55	9.80	48.35	56.00	-7.65	peak	
5		1.1569	31.81	9.80	41.61	46.00	-4.39	AVG	
6		1.6429	38.62	9.83	48.45	56.00	-7.55	peak	
7		1.6429	30.05	9.83	39.88	46.00	-6.12	AVG	
8		2.5609	37.09	9.93	47.02	56.00	-8.98	peak	
9		2.5609	25.31	9.93	35.24	46.00	-10.76	AVG	
10		11.9000	38.47	10.13	48.60	60.00	-11.40	peak	
11		11.9000	26.16	10.13	36.29	50.00	-13.71	AVG	

*:Maximum data x:Over limit !:over margin

●Reference Only



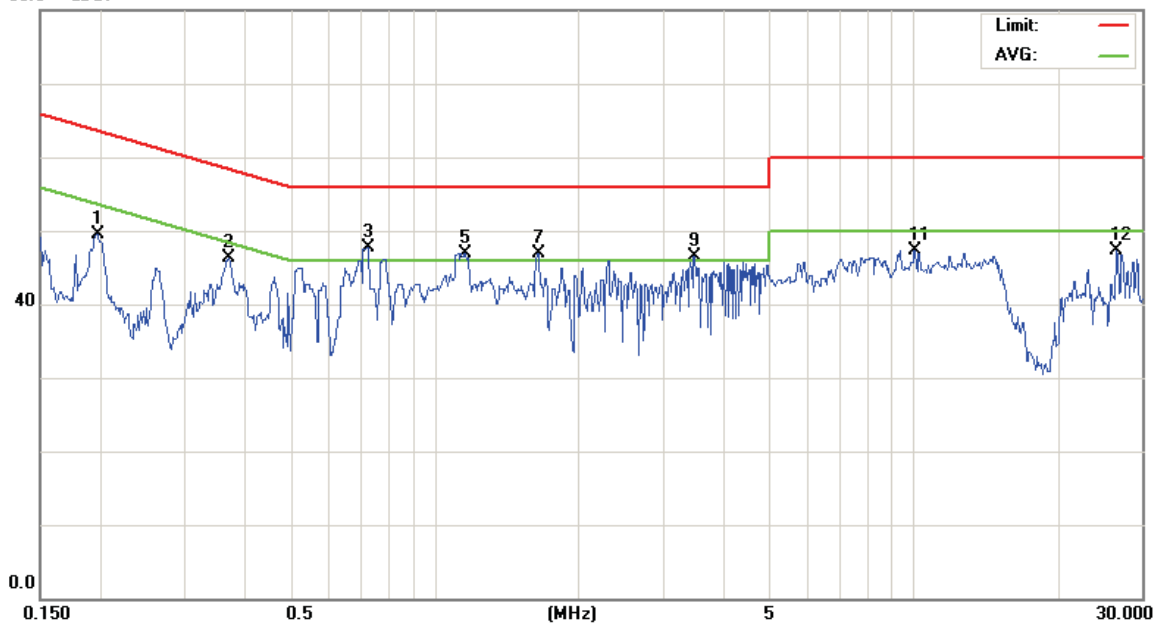
File :RS700(WIFI 11g)

Data :#2

Date: 2008-12-30

Time: 下午 10:32:45

80.0 dBuV



Site site#1

Phase: **L2**

Temperature: 26 °C

Limit: CISPR22 Class B Conduction(QP)

Power: AC 110V/60Hz

Humidity: 55 %

EUT:

M/N: 08-0128-E

Mode: 11g

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1968	39.77	9.74	49.51	63.74	-14.23	peak	
2		0.3709	36.48	9.78	46.26	58.48	-12.22	peak	
3		0.7247	37.86	9.80	47.66	56.00	-8.34	peak	
4		0.7247	31.95	9.80	41.75	46.00	-4.25	AVG	
5		1.1569	37.16	9.80	46.96	56.00	-9.04	peak	
6		1.1569	31.25	9.80	41.05	46.00	-4.95	AVG	
7		1.6429	37.07	9.83	46.90	56.00	-9.10	peak	
8	*	1.6429	31.99	9.83	41.82	46.00	-4.18	AVG	
9		3.4788	36.49	9.95	46.44	56.00	-9.56	peak	
10		3.4788	24.33	9.95	34.28	46.00	-11.72	AVG	
11		10.0500	37.16	10.08	47.24	60.00	-12.76	peak	
12		26.4500	37.03	10.18	47.21	60.00	-12.79	peak	

*:Maximum data x:Over limit !:over margin

●Reference Only



3. Radiated Emissions Requirements

3.1 Final radiation measurements were made on a three-meter:

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.

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 meters height, top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuous RS700y & Measurements spectrum range from 30 MHz to 26.5 GHz is investigated.

For measurements below 1 GHz the resolution bandwidth is set to 120 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

A nonconductive material surrounded the EUT to supporting the EUT for standing on three orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Biconilog Antenna (model VULB9163) at 3 Meter and the SCHWARZBECK Double Ridged Guide Antenna (model BBHA9120D&9170) was used in frequencies 1 - 26.5 GHz at a distance of 1 meter. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20dB/decade).

For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. No post - detector video filters were used in the test.



The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in micro volts per meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro volts per meter (dBuV/m).

The actual field intensity in decibels referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

$$(1) \text{ Amplitude (dBuV/m) = FI (dBuV) + AF (dBuV) + CL (dBuV) - Gain (dB)}$$

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.

$$(2) \text{ Actual Amplitude (dBuV/m) = Amplitude (dBuV) - Dis(dB)}$$

The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:

(a) For fundamental frequency :

Transmitter Output < +30dBm

(b) For spurious frequency :

Spurious emission limits = fundamental emission limit /10



3.2 Test Equipment List:

Describe	Manufacturer	Model	Serial Number	Calibration	
				Cal. Date	Due Date
Spectrum Analyzer	Agilent	E4408B	MY45107753	Jun. 05, 2008	Jun. 05, 2009
Pre Amplifier	Agilent	8449B	3008A02237	Jun. 03, 2008	Jun. 03, 2009
Pre Amplifier	Agilent	8447D	2944A10961	Jun. 10, 2008	Jun. 10, 2009
Test Receiver	R&S	ESCI	100367	Jun. 05, 2008	Jun. 05, 2009
Biconilog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	9163-270	Jun. 26, 2008	Jun. 26, 2009
Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	Jun. 26, 2008	Jun. 26, 2009
Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	Jun. 09, 2008	Jun. 09, 2009
Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120E	0899	Jun. 26, 2008	Jun. 26, 2009

3.3 Test Configuration:



Figure 4. Front View of the Test Configuration

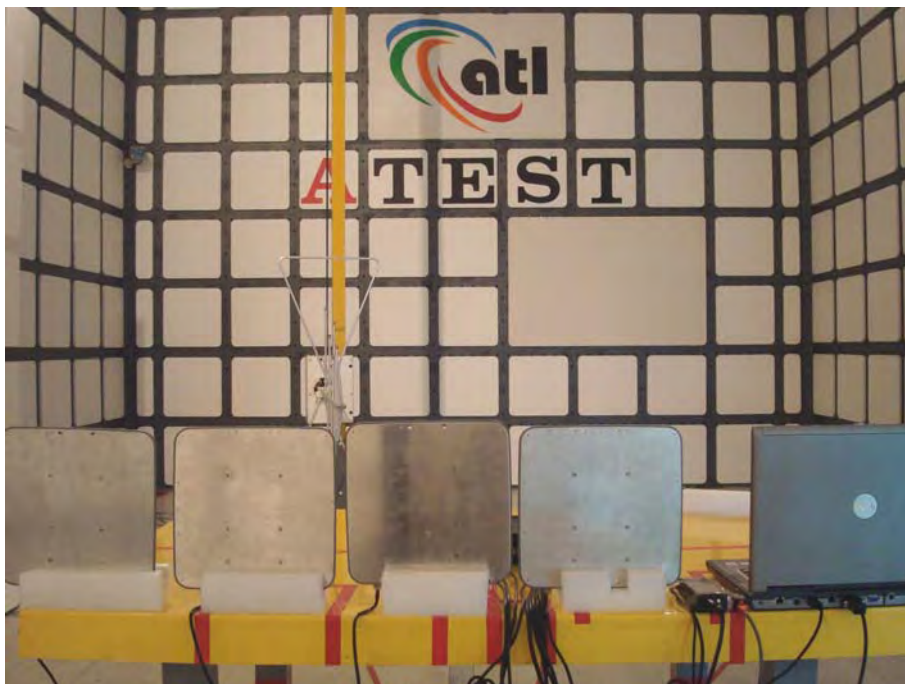


Figure 5. Rear View of the Test Configuration



Figure 6. Front View of the Test Configuration



Figure 7. Rear View of the Test Configuration



3.4 Test condition:

EUT tested in accordance with the specifications given by the manufacturer, and exercised in the most unfavorable manner.

3.5 Radiated Emissions Limits:

Frequency range (MHz)	Peak (dBuV)
30 to 88	40
88 to 216	43.5
216 to 960	46
Above 960	54



3.6 Measurement Data of Radiated Emissions:

3.6.1 Open Field Radiated Emissions (Subpart C) _ Below 1 G

3.6.1.1 802.11b _ Low CH

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Applicant : Unitech Electronics Co., Ltd.
 Model No : RS700
 EUT : Fixed Data Collection Terminal
 Test Mode : 802.11b _ CH1 2412.000 (Local Frequency: 2412.000 MHz)
 Main TX : V Polarization: 111.36(dBuV/m) / H Polarization: 101.37(dBuV/m)
 Test Date : 01/04/2009

Radiated Emissions _ V Polarization						
Frequency (MHz)	Read level	Factor	Amplitude (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector
35.94	54.25	-12.95	41.30	91.36	-50.06	Peak
67.80	55.14	-15.60	39.54	91.36	-51.82	Peak
92.64	51.48	-12.57	38.91	91.36	-52.45	Peak
103.98	56.08	-12.02	44.06	91.36	-47.30	Peak
121.26	56.27	-14.41	41.86	43.50	-1.64	QP
138.54	59.51	-16.24	43.27	91.36	-48.09	Peak
156.36	62.36	-15.79	46.57	91.36	-44.79	Peak
184.98	59.49	-13.81	45.68	91.36	-45.68	Peak
208.20	63.51	-12.87	50.64	91.36	-40.72	Peak
274.08	55.12	-10.82	44.30	46.00	-1.70	Peak
346.20	58.92	-9.05	49.87	91.36	-41.49	Peak
433.00	55.30	-8.01	47.29	91.36	-44.07	Peak
468.00	53.93	-7.77	46.16	91.36	-45.20	Peak
623.40	49.63	-4.56	45.07	91.36	-46.29	Peak
676.60	40.66	-4.21	36.45	91.36	-54.91	Peak
832.00	45.25	-1.53	43.72	91.36	-47.64	Peak
902.00	34.05	-0.32	33.73	91.36	-57.63	Peak



Radiated Emissions _ H Polarization						
Frequency (MHz)	Read level	Factor	Amplitude (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector
30.54	43.37	-13.31	30.06	81.37	-51.31	Peak
67.80	51.25	-15.60	35.65	81.37	-45.72	Peak
88.32	49.57	-13.70	35.87	81.37	-45.50	Peak
138.54	61.28	-16.24	45.04	81.37	-36.33	Peak
184.98	61.89	-13.81	48.08	81.37	-33.29	Peak
208.20	69.51	-12.87	56.64	81.37	-24.73	Peak
257.88	55.39	-11.21	44.18	46.00	-1.82	QP
295.14	56.72	-10.19	46.53	81.37	-34.84	Peak
311.20	63.51	-9.82	53.69	81.37	-27.68	Peak
363.00	60.33	-8.77	51.56	81.37	-29.81	Peak
389.60	58.03	-8.50	49.53	81.37	-31.84	Peak
416.20	59.06	-8.19	50.87	81.37	-30.50	Peak
468.00	57.70	-7.77	49.93	81.37	-31.44	Peak
571.60	51.57	-5.46	46.11	81.37	-35.26	Peak
623.40	51.96	-4.56	47.40	81.37	-33.97	Peak
728.40	48.64	-3.55	45.09	81.37	-36.28	Peak
832.00	46.94	-1.53	45.41	81.37	-35.96	Peak
953.80	37.76	0.23	37.99	81.37	-43.38	Peak

Notes:

1. Margin= Amplitude - Limits
2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
3. Height of table for EUT placed: 0.8 Meter.
4. ANT= Antenna height.
5. Amplitude= Reading Amplitude - Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambient noise.
8. All frequencies from 30MHz to 26.5GHz have been tested



3.6.1.2 802.11b _ Middle CH

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following

Applicant : Unitech Electronics Co., Ltd.
Model No : RS700
EUT : Fixed Data Collection Terminal
Test Mode : 802.11b CH6 2437.000 (Local Frequency: 2437.000 MHz)
Main TX : V Polarization: 109.11(dBuV/m) / H Polarization: 101.95 (dBuV/m)
Test Date : 01/04/2009

Radiated Emissions _ V Polarization						
Frequency (MHz)	Read level	Factor	Amplitude (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector
35.94	53.75	-12.95	40.80	89.11	-48.31	Peak
67.80	54.68	-15.60	39.08	89.11	-50.03	Peak
92.64	52.71	-12.57	40.14	89.11	-48.97	Peak
103.98	55.39	-12.02	43.37	89.11	-45.74	Peak
121.26	56.31	-14.41	41.90	43.50	-1.60	QP
138.54	58.72	-16.24	42.48	89.11	-46.63	Peak
156.36	61.44	-15.79	45.65	89.11	-43.46	Peak
184.98	58.59	-13.81	44.78	89.11	-44.33	Peak
208.20	62.83	-12.87	49.96	89.11	-39.15	Peak
274.08	55.35	-10.82	44.53	46.00	-1.47	Peak
346.20	59.21	-9.05	50.16	89.11	-38.95	Peak
433.00	54.62	-8.01	46.61	89.11	-42.50	Peak
468.00	52.33	-7.77	44.56	89.11	-44.55	Peak
623.40	50.35	-4.56	45.79	89.11	-43.32	Peak
676.60	41.82	-4.21	37.61	89.11	-51.50	Peak
832.00	46.27	-1.53	44.74	89.11	-44.37	Peak
902.00	35.83	-0.32	35.51	89.11	-53.60	Peak



Radiated Emissions _ H Polarization						
Frequency (MHz)	Read level	Factor	Amplitude (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector
30.54	42.66	-13.31	29.35	81.95	-52.60	Peak
67.80	50.63	-15.60	35.03	81.95	-46.92	Peak
88.32	50.73	-13.70	37.03	81.95	-44.92	Peak
138.54	60.88	-16.24	44.64	81.95	-37.31	Peak
184.98	62.46	-13.81	48.65	81.95	-33.30	Peak
208.20	58.07	-12.87	45.20	81.95	-36.75	Peak
257.88	55.42	-11.21	44.21	46.00	-1.79	QP
295.14	57.08	-10.19	46.89	81.95	-35.06	Peak
311.20	62.99	-9.82	53.17	81.95	-28.78	Peak
363.00	61.08	-8.77	52.31	81.95	-29.64	Peak
389.60	57.96	-8.50	49.46	81.95	-32.49	Peak
416.20	58.44	-8.19	50.25	81.95	-31.70	Peak
468.00	57.31	-7.77	49.54	81.95	-32.41	Peak
571.60	50.84	-5.46	45.38	81.95	-36.57	Peak
623.40	52.05	-4.56	47.49	81.95	-34.46	Peak
728.40	49.01	-3.55	45.46	81.95	-36.49	Peak
832.00	46.22	-1.53	44.69	81.95	-37.26	Peak
953.80	37.25	0.23	37.48	81.95	-44.47	Peak

Notes:

1. Margin= Amplitude - Limits
2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
3. Height of table for EUT placed: 0.8 Meter.
4. ANT= Antenna height.
5. Amplitude= Reading Amplitude - Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambient noise.
8. All frequencies from 30MHz to 26.5GHz have been tested



3.6.1.3 802.11b _ High CH

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Applicant : Unitech Electronics Co., Ltd.
Model No : RS700
EUT : Fixed Data Collection Terminal
Test Mode : 802.11b CH11 2462.000 (Local Frequency: 2462.000 MHz)
Main TX : V Polarization: 109.14 (dBuV/m) / H Polarization: 101.59 (dBuV/m)
Test Date : 01/04/2009

Radiated Emissions _ V Polarization						
Frequency (MHz)	Read level	Factor	Amplitude (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector
35.94	52.76	-12.95	39.81	89.14	-49.33	Peak
67.80	53.88	-15.60	38.28	89.14	-50.86	Peak
92.64	51.45	-12.57	38.88	89.14	-50.26	Peak
103.98	54.32	-12.02	42.30	89.14	-46.84	Peak
121.26	55.31	-14.41	40.90	43.50	-2.60	QP
138.54	56.32	-16.24	40.08	89.14	-49.06	Peak
156.36	69.45	-15.79	53.66	89.14	-35.48	Peak
184.98	58.03	-13.81	44.22	89.14	-44.92	Peak
208.20	60.64	-12.87	47.77	89.14	-41.37	Peak
274.08	54.31	-10.82	43.49	46.00	-2.51	Peak
346.20	58.77	-9.05	49.72	89.14	-39.42	Peak
433.00	52.43	-8.01	44.42	89.14	-44.72	Peak
468.00	51.75	-7.77	43.98	89.14	-45.16	Peak
623.40	49.58	-4.56	45.02	89.14	-44.12	Peak
676.60	40.33	-4.21	36.12	89.14	-53.02	Peak
832.00	47.18	-1.53	45.65	89.14	-43.49	Peak
902.00	36.22	-0.32	35.90	89.14	-53.24	Peak



Radiated Emissions _ H Polarization						
Frequency (MHz)	Read level	Factor	Amplitude (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector
30.54	41.77	-13.31	28.46	81.59	-53.13	Peak
67.80	49.38	-15.60	33.78	81.59	-47.81	Peak
88.32	49.61	-13.70	35.91	81.59	-45.68	Peak
138.54	59.25	-16.24	43.01	81.59	-38.58	Peak
184.98	61.33	-13.81	47.52	81.59	-34.07	Peak
208.20	59.12	-12.87	46.25	81.59	-35.34	Peak
257.88	55.35	-11.21	44.14	46.00	-1.86	QP
295.14	56.12	-10.19	45.93	81.59	-35.66	Peak
311.20	61.43	-9.82	51.61	81.59	-29.98	Peak
363.00	60.36	-8.77	51.59	81.59	-30.00	Peak
389.60	56.15	-8.50	47.65	81.59	-33.94	Peak
416.20	57.48	-8.19	49.29	81.59	-32.30	Peak
468.00	57.11	-7.77	49.34	81.59	-32.25	Peak
571.60	50.23	-5.46	44.77	81.59	-36.82	Peak
623.40	51.79	-4.56	47.23	81.59	-34.36	Peak
728.40	48.91	-3.55	45.36	81.59	-36.23	Peak
832.00	45.85	-1.53	44.32	81.59	-37.27	Peak
953.80	36.12	0.23	36.35	81.59	-45.24	Peak

Notes:

1. Margin= Amplitude - Limits
2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
3. Height of table for EUT placed: 0.8 Meter.
4. ANT= Antenna height.
5. Amplitude= Reading Amplitude - Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambient noise.
8. All frequencies from 30MHz to 26.5GHz have been tested



3.6.1.4 802.11g _ Low CH

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Applicant : Unitech Electronics Co., Ltd.
Model No : RS700
EUT : Fixed Data Collection Terminal
Test Mode : 802.11g CH1 2412.000 (Local Frequency: 2412.000 MHz)
Main TX : V Polarization: 110.86 (dBuV/m) / H Polarization: 102.00 (dBuV/m)
Test Date : 01/04/2009

Radiated Emissions _ V Polarization						
Frequency (MHz)	Read level	Factor	Amplitude (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector
31.08	53.21	-13.30	39.91	90.86	-50.95	Peak
67.80	56.12	-15.60	40.52	90.86	-50.34	Peak
93.18	51.29	-12.45	38.84	90.86	-52.02	Peak
103.98	54.10	-12.02	42.08	90.86	-48.78	Peak
131.52	56.82	-15.74	41.08	43.50	-6.21	QP
163.92	52.63	-15.34	37.29	43.50	-53.57	Peak
208.20	60.20	-12.87	47.33	90.86	-43.53	Peak
235.20	51.50	-11.71	39.79	90.86	-51.07	Peak
278.40	51.48	-10.53	40.95	46.00	-5.05	Peak
311.20	55.93	-9.82	46.11	90.86	-44.75	Peak
392.40	55.23	-8.49	46.74	90.86	-44.12	Peak
459.60	50.16	-7.87	42.29	90.86	-48.57	Peak
519.80	48.36	-6.57	41.79	90.86	-49.07	Peak
623.40	45.56	-4.56	41.00	90.86	-49.86	Peak
658.40	39.74	-4.36	35.38	90.86	-55.48	Peak
855.80	41.31	-1.28	40.03	90.86	-50.83	Peak
994.40	34.70	0.79	35.49	54.00	-18.51	Peak



Radiated Emissions _ H Polarization						
Frequency (MHz)	Read level	Factor	Amplitude (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector
30.54	45.48	-13.31	32.17	82.00	-49.83	Peak
72.12	52.40	-16.83	35.57	82.00	-46.43	Peak
92.10	49.32	-12.71	36.61	82.00	-45.39	Peak
132.06	58.25	-15.77	42.48	43.50	-1.02	Peak
184.98	59.24	-13.81	45.43	82.00	-36.57	Peak
208.20	67.78	-12.87	54.91	82.00	-27.09	Peak
250.32	53.50	-10.84	42.66	46.00	-3.34	QP
281.10	54.50	-10.39	44.11	46.00	-1.89	Peak
311.20	60.36	-9.82	50.54	82.00	-31.46	Peak
386.80	60.66	-8.54	52.12	82.00	-29.88	Peak
470.80	53.80	-7.76	46.04	82.00	-35.96	Peak
623.40	46.64	-4.56	42.08	82.00	-39.92	Peak
728.40	45.58	-3.55	42.03	82.00	-39.97	Peak
832.00	46.02	-1.53	44.49	82.00	-37.51	Peak
937.00	38.28	0.12	38.40	82.00	-43.60	Peak

Notes:

1. Margin= Amplitude - Limits
2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
3. Height of table for EUT placed: 0.8 Meter.
4. ANT= Antenna height.
5. Amplitude= Reading Amplitude - Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambient noise.
8. All frequencies from 30MHz to 26.5GHz have been tested



3.6.1.5 802.11g _ Middle CH

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following

Applicant : Unitech Electronics Co., Ltd.
 Model No : RS700
 EUT : Fixed Data Collection Terminal
 Test Mode : 802.11g CH6 2437.000 (Local Frequency: 2437.000 MHz)
 Main TX : V Polarization: 107.78 (dBuV/m) / H Polarization: 99.53 (dBuV/m)
 Test Date : 01/04/2009

Radiated Emissions _ V Polarization						
Frequency (MHz)	Read level	Factor	Amplitude (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector
31.08	52.96	-13.30	39.66	87.78	-48.12	Peak
67.80	56.11	-15.60	40.51	87.78	-47.27	Peak
93.18	50.38	-12.45	37.93	87.78	-49.85	Peak
103.98	53.96	-12.02	41.94	87.78	-45.84	Peak
131.52	56.91	-15.74	41.17	43.50	-2.33	QP
163.92	52.65	-15.34	37.31	43.50	-6.19	Peak
208.20	60.18	-12.87	47.31	87.78	-40.47	Peak
235.20	50.91	-11.71	39.20	87.78	-48.58	Peak
278.40	50.36	-10.53	39.83	46.00	-6.17	Peak
311.20	55.62	-9.82	45.80	87.78	-41.98	Peak
392.40	55.31	-8.49	46.82	87.78	-40.96	Peak
459.60	50.13	-7.87	42.26	87.78	-45.52	Peak
519.80	48.71	-6.57	42.14	87.78	-45.64	Peak
623.40	46.02	-4.56	41.46	87.78	-46.32	Peak
658.40	38.75	-4.36	34.39	87.78	-53.39	Peak
855.80	40.33	-1.28	39.05	87.78	-48.73	Peak
994.40	36.21	0.79	37.00	54.00	-17.00	Peak



Radiated Emissions _ H Polarization						
Frequency (MHz)	Read level	Factor	Amplitude (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector
30.54	46.71	-13.31	33.40	79.53	-46.13	Peak
72.12	51.11	-16.83	34.28	79.53	-45.25	Peak
92.10	48.75	-12.71	36.04	79.53	-43.49	Peak
132.06	58.19	-15.77	42.42	43.50	-1.08	Peak
184.98	59.41	-13.81	45.60	79.53	-33.93	Peak
208.20	66.82	-12.87	53.95	79.53	-25.58	Peak
250.32	53.57	-10.84	42.73	46.00	-3.27	QP
281.10	55.35	-10.39	44.96	46.00	-1.04	Peak
311.20	59.27	-9.82	49.45	79.53	-30.08	Peak
386.80	60.43	-8.54	51.89	79.53	-27.64	Peak
470.80	52.79	-7.76	45.03	79.53	-34.50	Peak
623.40	46.38	-4.56	41.82	79.53	-37.71	Peak
728.40	46.01	-3.55	42.46	79.53	-37.07	Peak
832.00	46.15	-1.53	44.62	79.53	-34.91	Peak
937.00	39.18	0.12	39.30	79.53	-40.23	Peak

Notes:

1. Margin= Amplitude - Limits
2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
3. Height of table for EUT placed: 0.8 Meter.
4. ANT= Antenna height.
5. Amplitude= Reading Amplitude - Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambient noise.
8. All frequencies from 30MHz to 26.5GHz have been tested



3.6.1.6 802.11g _ High CH

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Applicant : Unitech Electronics Co., Ltd.
 Model No : RS700
 EUT : Fixed Data Collection Terminal
 Test Mode : 802.11g CH11 2462.000 (Local Frequency: 2462.000 MHz)
 Main TX : V Polarization: 109.9 (dBuV/m) / H Polarization: 96.84 (dBuV/m)
 Test Date : 01/04/2009

Radiated Emissions _ V Polarization						
Frequency (MHz)	Read level	Factor	Amplitude (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector
31.08	52.16	-13.30	38.86	89.90	-51.04	Peak
67.80	54.38	-15.60	38.78	89.90	-51.12	Peak
93.18	49.27	-12.45	36.82	89.90	-53.08	Peak
103.98	55.48	-12.02	43.46	89.90	-46.44	Peak
131.52	56.77	-15.74	41.03	43.50	-2.47	QP
163.92	52.81	-15.34	37.47	43.50	-6.03	Peak
208.20	61.12	-12.87	48.25	89.90	-41.65	Peak
235.20	50.45	-11.71	38.74	89.90	-51.16	Peak
278.40	50.28	-10.53	39.75	46.00	-6.25	Peak
311.20	55.81	-9.82	45.99	89.90	-43.91	Peak
392.40	54.63	-8.49	46.14	89.90	-43.76	Peak
459.60	51.16	-7.87	43.29	89.90	-46.61	Peak
519.80	50.88	-6.57	44.31	89.90	-45.59	Peak
623.40	46.25	-4.56	41.69	89.90	-48.21	Peak
658.40	40.27	-4.36	35.91	89.90	-53.99	Peak
855.80	40.18	-1.28	38.90	89.90	-51.00	Peak
994.40	38.54	0.79	39.33	54.00	-14.67	Peak



Radiated Emissions _ H Polarization						
Frequency (MHz)	Read level	Factor	Amplitude (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector
30.54	46.27	-13.31	32.96	76.84	-43.88	Peak
72.12	53.18	-16.83	36.35	76.84	-40.49	Peak
92.10	50.15	-12.71	37.44	76.84	-39.40	Peak
132.06	58.13	-15.77	42.36	43.50	-1.14	Peak
184.98	59.24	-13.81	45.43	76.84	-31.41	Peak
208.20	66.32	-12.87	53.45	76.84	-23.39	Peak
250.32	54.01	-10.84	43.17	46.00	-2.83	QP
281.10	53.08	-10.39	42.69	46.00	-3.31	Peak
311.20	59.35	-9.82	49.53	76.84	-27.31	Peak
386.80	58.72	-8.54	50.18	76.84	-26.66	Peak
470.80	54.16	-7.76	46.40	76.84	-30.44	Peak
623.40	47.47	-4.56	42.91	76.84	-33.93	Peak
728.40	44.38	-3.55	40.83	76.84	-36.01	Peak
832.00	47.06	-1.53	45.53	76.84	-31.31	Peak
937.00	39.75	0.12	39.87	76.84	-36.97	Peak

Notes:

1. Margin= Amplitude - Limits
2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
3. Height of table for EUT placed: 0.8 Meter.
4. ANT= Antenna height.
5. Amplitude= Reading Amplitude - Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambient noise.
8. All frequencies from 30MHz to 26.5GHz have been tested



3.6.2 Open Field Radiated Emissions (Subpart C) _ Above 1 G

3.6.2.1 802.11b _ Low CH

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Applicant : Unitech Electronics Co., Ltd.
Model No : RS700
EUT : Fixed Data Collection Terminal
Test Mode : 802.11b _ CH1 2412.000 (Local Frequency: 2412.000 MHz)
Test Date : 12/22/2008

Please refer to next pager of detail testing data.

Notes:

1. Margin= Amplitude - Limits
2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
3. Height of table for EUT placed: 0.8 Meter.
4. ANT= Antenna height.
5. Amplitude= Reading Amplitude - Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambit noise.
8. All frequencies from 30MHz to 26.5GHz have been tested

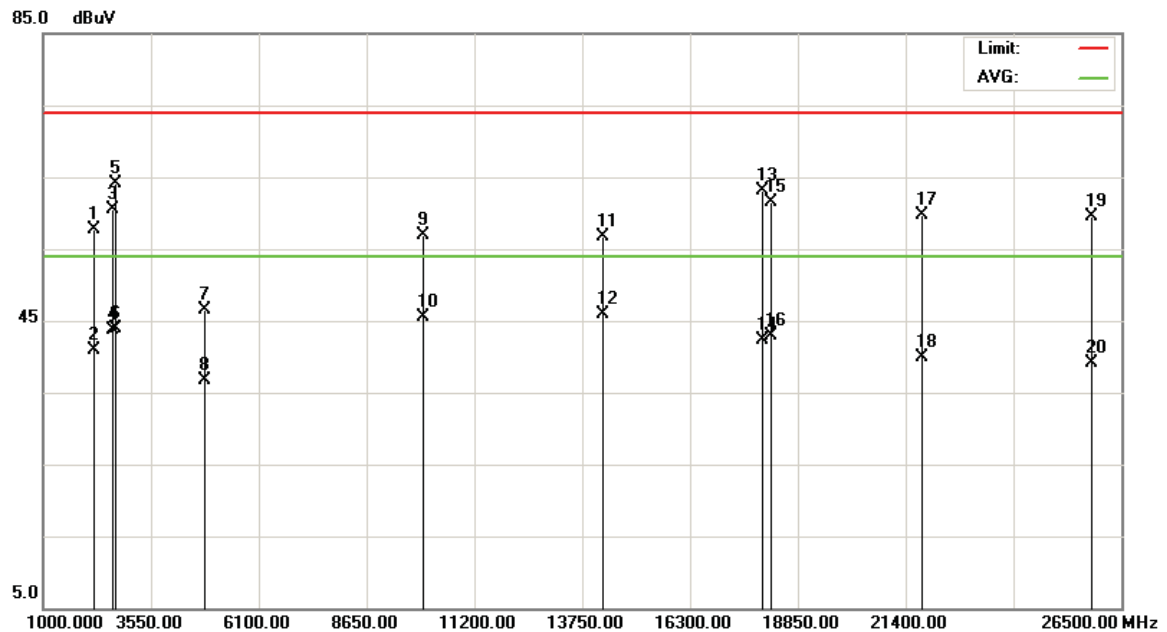


File :RS700(2412)

Data :#14

Date: 2008/12/22

Time: 下午 09:57:02



Site

Polarization: **Vertical**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: CH01(2412MHz)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1		2186.600	57.28	0.37	57.65	74.00	-16.35	peak			
2		2186.600	40.60	0.37	40.97	54.00	-13.03	AVG			
3		2635.400	59.56	0.95	60.51	74.00	-13.49	peak			
4		2635.400	42.75	0.95	43.70	54.00	-10.30	AVG			
5		2700.000	41.47	22.58	64.05	74.00	-9.95	peak			
6		2700.000	21.36	22.58	43.94	54.00	-10.06	AVG			
7		4824.000	38.96	7.48	46.44	74.00	-27.56	peak			
8		4824.000	29.22	7.48	36.70	54.00	-17.30	AVG			
9		10000.00	38.99	17.94	56.93	74.00	-17.07	peak			
10		10000.00	27.58	17.94	45.52	54.00	-8.48	AVG			
11		14220.00	37.98	18.78	56.76	74.00	-17.24	peak			
12	*	14220.00	27.15	18.78	45.93	54.00	-8.07	AVG			
13		18000.00	37.54	25.57	63.11	74.00	-10.89	peak			

*:Maximum data x:Over limit !:over margin

●Reference Only



Site	Polarization: Vertical	Temperature: 22 °C
Limit: FCC part 15 (PK)	Power:	Humidity: 60 %
EUT:	Distance: 1m	
M/N: 08-0128-E		
Mode: WIFI(11b)		
Note: CH01(2412MHz)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree
14		18000.00	16.65	25.57	42.22	54.00	-11.78	AVG		Comment
15		18212.50	38.35	23.22	61.57	74.00	-12.43	peak		
16		18212.50	19.71	23.22	42.93	54.00	-11.07	AVG		
17		21782.50	38.57	21.22	59.79	74.00	-14.21	peak		
18		21782.50	18.60	21.22	39.82	54.00	-14.18	AVG		
19		25798.75	40.77	18.72	59.49	74.00	-14.51	peak		
20		25798.75	20.34	18.72	39.06	54.00	-14.94	AVG		

*:Maximum data x:Over limit !:over margin

●Reference Only

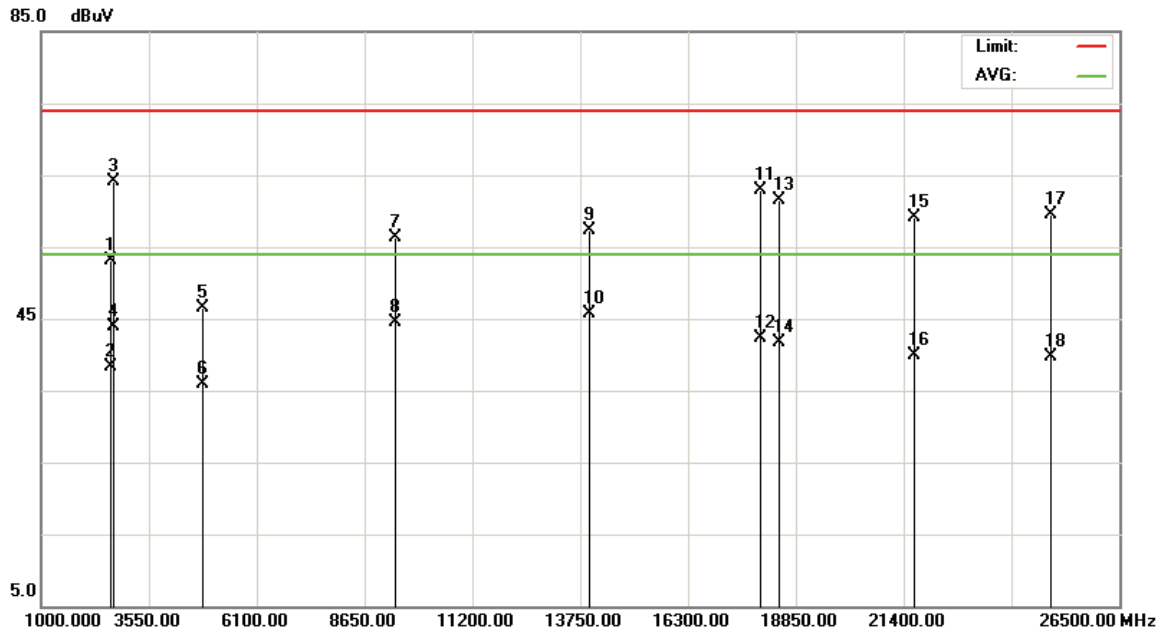


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Data :#5

Date: 2008/12/22

Time: 下午 10:01:45



Site

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: CH01(2412MHz)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Antenna Height cm	Table Degree degree	Comment
1		2635.400	52.13	0.95	53.08	74.00	-20.92	peak		
2		2635.400	37.38	0.95	38.33	54.00	-15.67	AVG		
3		2700.000	41.55	22.58	64.13	74.00	-9.87	peak		
4		2700.000	21.26	22.58	43.84	54.00	-10.16	AVG		
5		4824.000	39.01	7.48	46.49	74.00	-27.51	peak		
6		4824.000	28.41	7.48	35.89	54.00	-18.11	AVG		
7		9343.000	39.34	16.93	56.27	74.00	-17.73	peak		
8		9343.000	27.61	16.93	44.54	54.00	-9.46	AVG		
9		13960.00	29.17	28.11	57.28	74.00	-16.72	peak		
10	*	13960.00	17.50	28.11	45.61	54.00	-8.39	AVG		
11		18000.00	27.80	35.11	62.91	74.00	-11.09	peak		
12		18000.00	7.12	35.11	42.23	54.00	-11.77	AVG		
13		18425.00	38.43	23.14	61.57	74.00	-12.43	peak		

*:Maximum data x:Over limit !:over margin

●Reference Only



Site	Polarization: <i>Horizontal</i>	Temperature: 22 °C
Limit: FCC part 15 (PK)	Power:	Humidity: 60 %
EUT:	Distance: 1m	
M/N: 08-0128-E		
Mode: WIFI(11b)		
Note: CH01(2412MHz)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree
14		18425.00	18.49	23.14	41.63	54.00	-12.37	AVG		
15		21633.75	37.73	21.28	59.01	74.00	-14.99	peak		
16		21633.75	18.61	21.28	39.89	54.00	-14.11	AVG		
17		24885.00	39.92	19.50	59.42	74.00	-14.58	peak		
18		24885.00	20.20	19.50	39.70	54.00	-14.30	AVG		

*:Maximum data x:Over limit !:over margin

●Reference Only



3.6.2.2 802.11b _ Middle CH

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following

Applicant : Unitech Electronics Co., Ltd.
Model No : RS700
EUT : Fixed Data Collection Terminal
Test Mode : 802.11b CH6 2437.000 (Local Frequency: 2437.000 MHz)
Test Date : 12/22/2008

Please refer to next pager of detail testing data.

Notes:

1. Margin= Amplitude - Limits
2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
3. Height of table for EUT placed: 0.8 Meter.
4. ANT= Antenna height.
5. Amplitude= Reading Amplitude - Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambit noise.
8. All frequencies from 30MHz to 26.5GHz have been tested



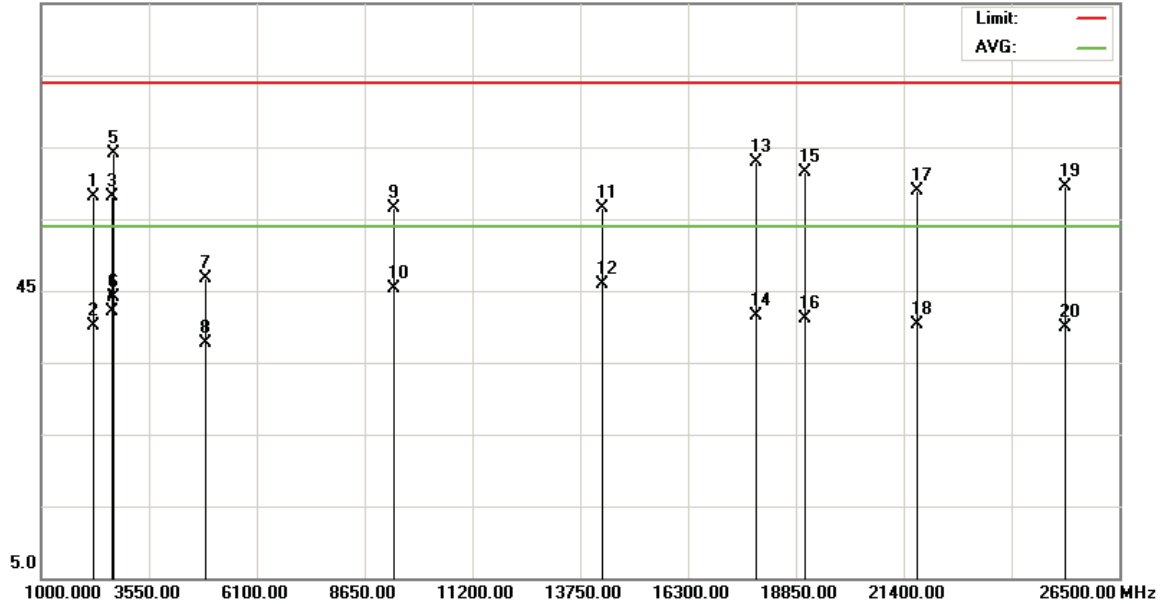
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Data :#14

Date: 2008/12/22

Time: 下午 10:11:50

85.0 dBuV



Site

Polarization: **Vertical**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: CH06(2437MHz)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Antenna Height cm	Table Degree degree	Comment
1		2220.600	57.83	0.34	58.17	74.00	-15.83	peak		
2		2220.600	39.75	0.34	40.09	54.00	-13.91	AVG		
3		2659.200	57.20	0.92	58.12	74.00	-15.88	peak		
4		2659.200	41.11	0.92	42.03	54.00	-11.97	AVG		
5		2700.000	41.48	22.58	64.06	74.00	-9.94	peak		
6		2700.000	21.45	22.58	44.03	54.00	-9.97	AVG		
7		4874.000	39.03	7.72	46.75	74.00	-27.25	peak		
8		4874.000	29.97	7.72	37.69	54.00	-16.31	AVG		
9		9324.750	39.60	16.91	56.51	74.00	-17.49	peak		
10		9324.750	28.39	16.91	45.30	54.00	-8.70	AVG		
11		14240.00	37.84	18.71	56.55	74.00	-17.45	peak		
12	*	14240.00	27.12	18.71	45.83	54.00	-8.17	AVG		
13		17900.00	38.04	24.96	63.00	74.00	-11.00	peak		

*:Maximum data x:Over limit !:over margin

●Reference Only



Site	Polarization: Vertical	Temperature: 22 °C
Limit: FCC part 15 (PK)	Power:	Humidity: 60 %
EUT:	Distance: 1m	
M/N: 08-0128-E		
Mode: WIFI(11b)		
Note: CH06(2437MHz)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree
14		17900.00	16.52	24.96	41.48	54.00	-12.52	AVG		
15		19041.25	38.55	23.05	61.60	74.00	-12.40	peak		
16		19041.25	18.06	23.05	41.11	54.00	-12.89	AVG		
17		21718.75	37.73	21.23	58.96	74.00	-15.04	peak		
18		21718.75	18.98	21.23	40.21	54.00	-13.79	AVG		
19		25225.00	40.39	19.16	59.55	74.00	-14.45	peak		
20		25225.00	20.70	19.16	39.86	54.00	-14.14	AVG		

*:Maximum data x:Over limit !:over margin

●Reference Only



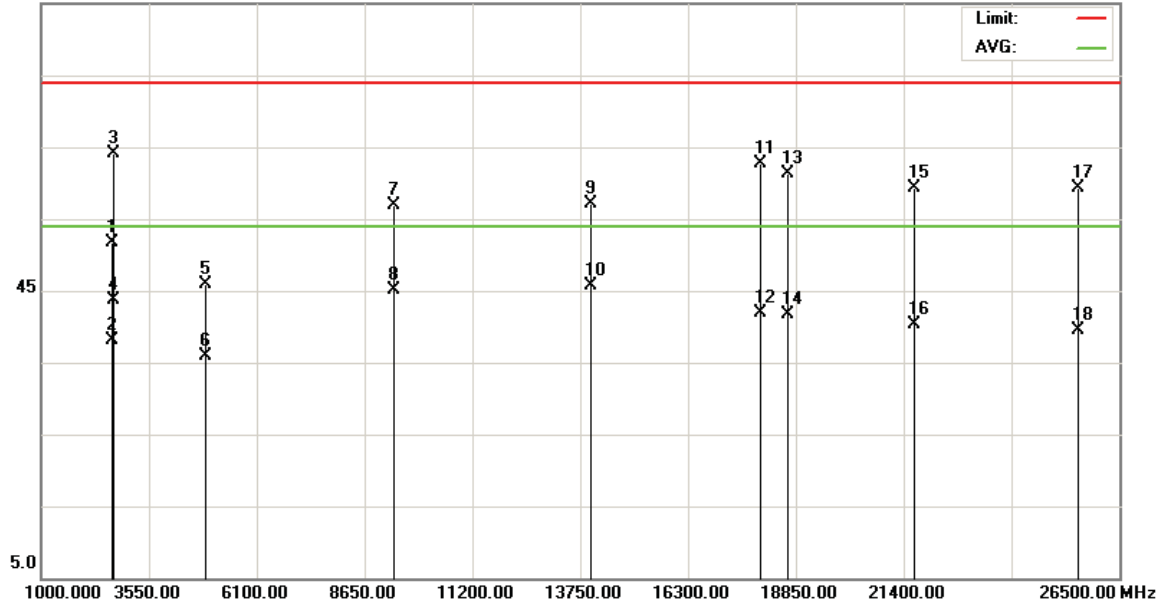
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Date: 2008/12/22

Time: 下午 10:15:53

85.0 dBuV



Site

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: CH06(2437MHz)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Antenna Height cm	Table Degree degree	Comment
1		2659.200	50.73	0.92	51.65	74.00	-22.35	peak		
2		2659.200	37.27	0.92	38.19	54.00	-15.81	AVG		
3		2700.000	41.43	22.58	64.01	74.00	-9.99	peak		
4		2700.000	21.16	22.58	43.74	54.00	-10.26	AVG		
5		4874.000	38.25	7.72	45.97	74.00	-28.03	peak		
6		4874.000	28.13	7.72	35.85	54.00	-18.15	AVG		
7		9324.750	40.06	16.91	56.97	74.00	-17.03	peak		
8		9324.750	28.10	16.91	45.01	54.00	-8.99	AVG		
9		13980.00	28.93	28.16	57.09	74.00	-16.91	peak		
10	*	13980.00	17.46	28.16	45.62	54.00	-8.38	AVG		
11		18000.00	27.58	35.11	62.69	74.00	-11.31	peak		
12		18000.00	6.87	35.11	41.98	54.00	-12.02	AVG		
13		18637.50	38.31	23.08	61.39	74.00	-12.61	peak		

*:Maximum data x:Over limit !:over margin

●Reference Only



Site	Polarization: Horizontal	Temperature: 22 °C
Limit: FCC part 15 (PK)	Power:	Humidity: 60 %
EUT:	Distance: 1m	
M/N: 08-0128-E		
Mode: WIFI(11b)		
Note: CH06(2437MHz)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree
14		18637.50	18.69	23.08	41.77	54.00	-12.23	AVG		
15		21655.00	38.00	21.27	59.27	74.00	-14.73	peak		
16		21655.00	18.97	21.27	40.24	54.00	-13.76	AVG		
17		25522.50	40.25	18.97	59.22	74.00	-14.78	peak		
18		25522.50	20.45	18.97	39.42	54.00	-14.58	AVG		

*:Maximum data x:Over limit !:over margin

●Reference Only



3.6.2.3 802.11b _ Middle CH

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Applicant : Unitech Electronics Co., Ltd.
Model No : RS700
EUT : Fixed Data Collection Terminal
Test Mode : 802.11b CH11 2462.000 (Local Frequency: 2462.000 MHz)
Test Date : 12/22/2008

Please refer to next pager of detail testing data.

Notes:

1. Margin= Amplitude - Limits
2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
3. Height of table for EUT placed: 0.8 Meter.
4. ANT= Antenna height.
5. Amplitude= Reading Amplitude - Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambit noise.
8. All frequencies from 30MHz to 26.5GHz have been tested



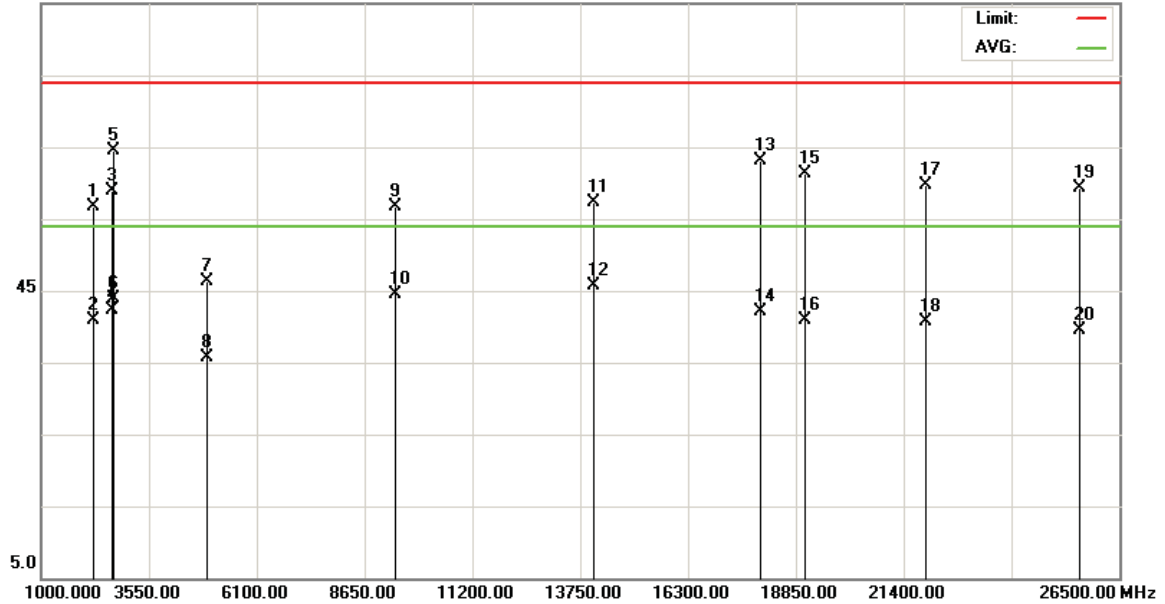
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Data :#14

Date: 2008/12/22

Time: 下午 10:22:05

85.0 dBuV



Site

Polarization: **Vertical**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: CH11(2462MHz)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Antenna Height cm	Table Degree degree	Comment
1		2241.000	56.21	0.44	56.65	74.00	-17.35	peak		
2		2241.000	40.39	0.44	40.83	54.00	-13.17	AVG		
3		2679.600	57.84	1.00	58.84	74.00	-15.16	peak		
4		2679.600	41.36	1.00	42.36	54.00	-11.64	AVG		
5		2700.000	42.00	22.58	64.58	74.00	-9.42	peak		
6		2700.000	21.35	22.58	43.93	54.00	-10.07	AVG		
7		4924.000	38.65	7.65	46.30	74.00	-27.70	peak		
8		4924.000	28.07	7.65	35.72	54.00	-18.28	AVG		
9		9361.250	39.80	16.98	56.78	74.00	-17.22	peak		
10		9361.250	27.46	16.98	44.44	54.00	-9.56	AVG		
11		14060.00	38.50	18.72	57.22	74.00	-16.78	peak		
12	*	14060.00	27.00	18.72	45.72	54.00	-8.28	AVG		
13		18000.00	37.45	25.57	63.02	74.00	-10.98	peak		

*:Maximum data x:Over limit l:over margin

●Reference Only



Site	Polarization: Vertical	Temperature: 22 °C
Limit: FCC part 15 (PK)	Power:	Humidity: 60 %
EUT:	Distance: 1m	
M/N: 08-0128-E		
Mode: WIFI(11b)		
Note: CH11(2462MHz)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree
14		18000.00	16.53	25.57	42.10	54.00	-11.90	AVG		
15		19041.25	38.31	23.05	61.36	74.00	-12.64	peak		
16		19041.25	17.90	23.05	40.95	54.00	-13.05	AVG		
17		21888.75	38.57	21.18	59.75	74.00	-14.25	peak		
18		21888.75	19.48	21.18	40.66	54.00	-13.34	AVG		
19		25543.75	40.41	18.95	59.36	74.00	-14.64	peak		
20		25543.75	20.60	18.95	39.55	54.00	-14.45	AVG		

*:Maximum data x:Over limit !:over margin

●Reference Only



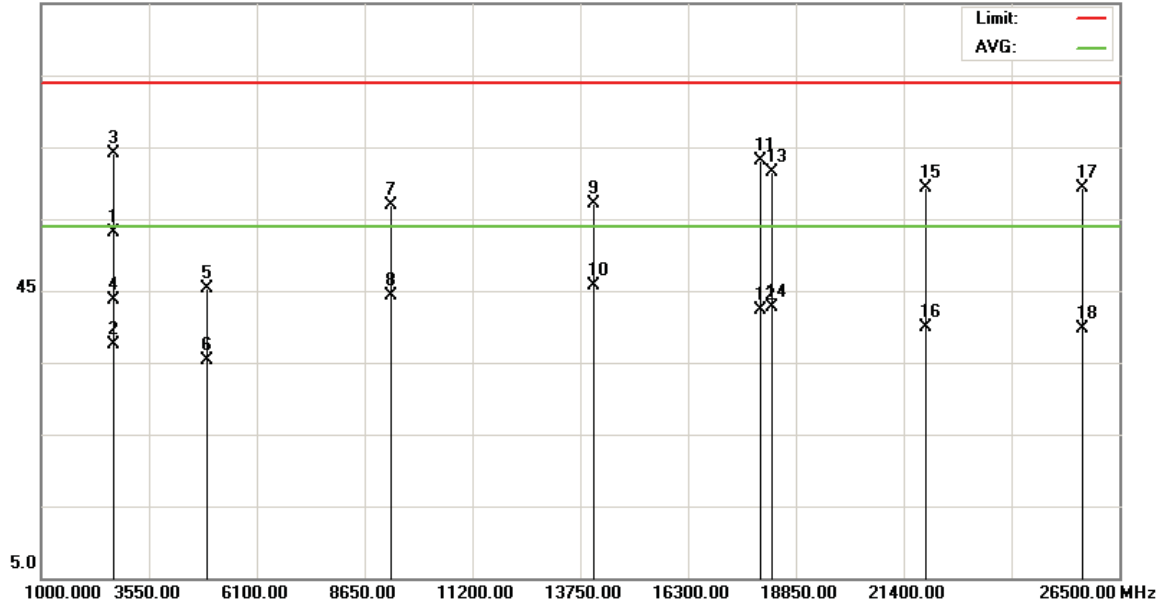
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Date: 2008/12/22

Time: 下午 10:25:47

85.0 dBuV



Site

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: CH11(2462MHz) · Antenna 100cm

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Antenna Height cm	Table Degree degree	Comment
1		2686.400	52.17	1.02	53.19	74.00	-20.81	peak		
2		2686.400	36.54	1.02	37.56	54.00	-16.44	AVG		
3		2700.000	41.43	22.58	64.01	74.00	-9.99	peak		
4		2700.000	21.06	22.58	43.64	54.00	-10.36	AVG		
5		4924.000	37.64	7.65	45.29	74.00	-28.71	peak		
6		4924.000	27.74	7.65	35.39	54.00	-18.61	AVG		
7		9270.000	40.32	16.61	56.93	74.00	-17.07	peak		
8		9270.000	27.72	16.61	44.33	54.00	-9.67	AVG		
9		14080.00	28.76	28.35	57.11	74.00	-16.89	peak		
10	*	14080.00	17.42	28.35	45.77	54.00	-8.23	AVG		
11		18000.00	28.02	35.11	63.13	74.00	-10.87	peak		
12		18000.00	7.11	35.11	42.22	54.00	-11.78	AVG		
13		18276.25	38.34	23.21	61.55	74.00	-12.45	peak		

*:Maximum data x:Over limit !:over margin

●Reference Only



Site	Polarization: <i>Horizontal</i>	Temperature: 22 °C
Limit: FCC part 15 (PK)	Power:	Humidity: 60 %
EUT:	Distance: 1m	
M/N: 08-0128-E		
Mode: WIFI(11b)		
Note: CH11(2462MHz) , Antenna 100cm		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree
14		18276.25	19.51	23.21	42.72	54.00	-11.28	AVG		
15		21931.25	38.06	21.15	59.21	74.00	-14.79	peak		
16		21931.25	18.84	21.15	39.99	54.00	-14.01	AVG		
17		25628.75	40.42	18.89	59.31	74.00	-14.69	peak		
18		25628.75	20.82	18.89	39.71	54.00	-14.29	AVG		

*:Maximum data x:Over limit !:over margin

●Reference Only



3.6.2.4 802.11g _ Low CH

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Applicant : Unitech Electronics Co., Ltd.
Model No : RS700
EUT : Fixed Data Collection Terminal
Test Mode : 802.11g CH1 2412.000 (Local Frequency: 2412.000 MHz)
Test Date : 12/22/2008

Please refer to next pager of detail testing data.

Notes:

1. Margin= Amplitude - Limits
2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
3. Height of table for EUT placed: 0.8 Meter.
4. ANT= Antenna height.
5. Amplitude= Reading Amplitude - Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambit noise.
8. All frequencies from 30MHz to 26.5GHz have been tested



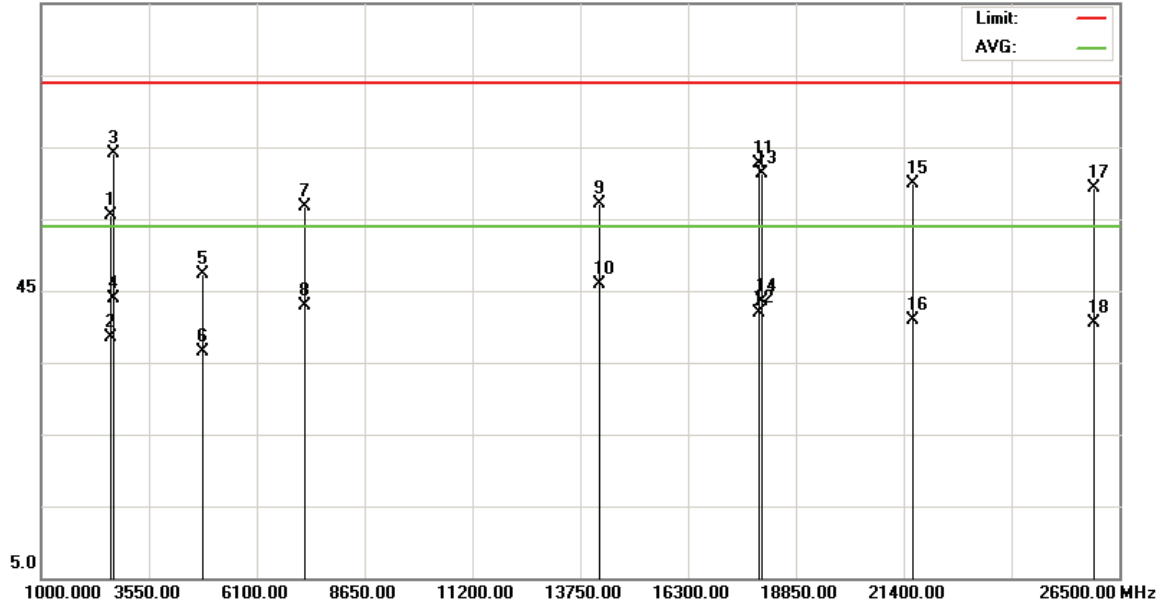
File :RS700(2412)

Data :#14

Date: 2008/12/22

Time: 下午 10:32:40

85.0 dBuV



Site

Polarization: **Vertical**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH01(2412MHz)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Antenna Height cm	Table Degree degree	Comment
1		2635.400	54.58	0.95	55.53	74.00	-18.47	peak		
2		2635.400	37.59	0.95	38.54	54.00	-15.46	AVG		
3		2700.000	41.59	22.58	64.17	74.00	-9.83	peak		
4		2700.000	21.26	22.58	43.84	54.00	-10.16	AVG		
5		4824.000	39.74	7.48	47.22	74.00	-26.78	peak		
6		4824.000	28.95	7.48	36.43	54.00	-17.57	AVG		
7		7244.250	42.85	13.76	56.61	74.00	-17.39	peak		
8		7244.250	29.06	13.76	42.82	54.00	-11.18	AVG		
9		14200.00	38.28	18.86	57.14	74.00	-16.86	peak		
10	*	14200.00	27.08	18.86	45.94	54.00	-8.06	AVG		
11		17980.00	37.59	25.21	62.80	74.00	-11.20	peak		
12		17980.00	16.67	25.21	41.88	54.00	-12.12	AVG		
13		18042.50	38.09	23.27	61.36	74.00	-12.64	peak		

*:Maximum data x:Over limit !:over margin

●Reference Only



Site	Polarization: <i>Vertical</i>	Temperature: 22 °C
Limit: FCC part 15 (PK)	Power:	Humidity: 60 %
EUT:	Distance: 1m	
M/N: 08-0128-E		
Mode: WIFI(11g)		
Note: CH01(2412MHz)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree
14		18042.50	20.19	23.27	43.46	54.00	-10.54	AVG		
15		21612.50	38.68	21.28	59.96	74.00	-14.04	peak		
16		21612.50	19.68	21.28	40.96	54.00	-13.04	AVG		
17		25883.75	40.66	18.65	59.31	74.00	-14.69	peak		
18		25883.75	21.83	18.65	40.48	54.00	-13.52	AVG		

*:Maximum data x:Over limit !:over margin

●Reference Only



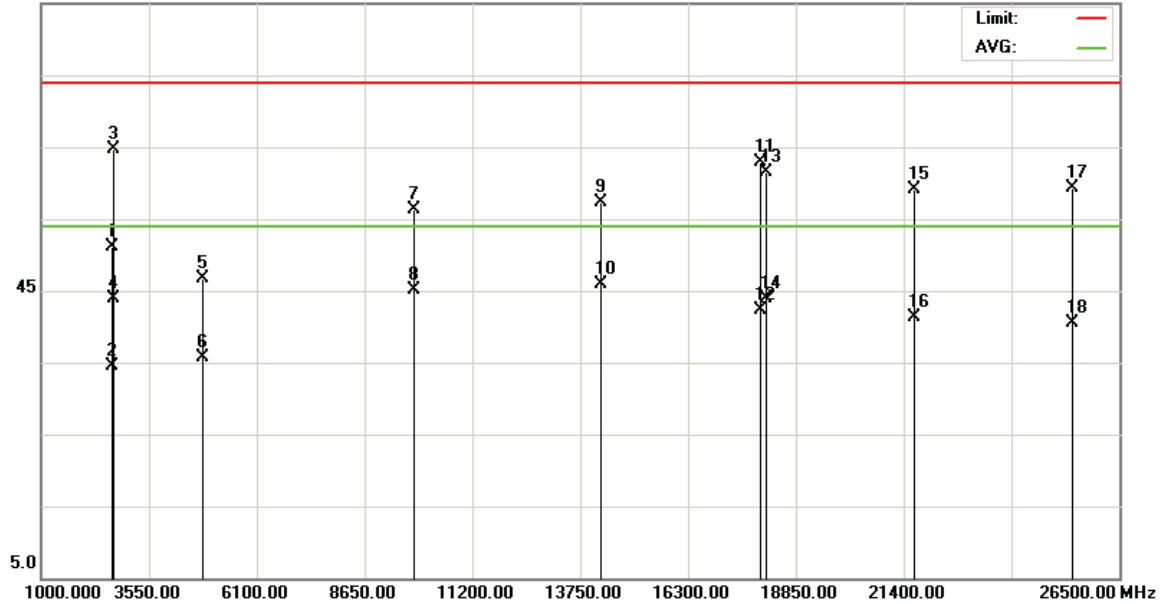
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Data :#5

Date:2008/12/22

Time: 下午 10:36:31

85.0 dBuV



Site

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH01(2412MHz) · Antenna 100cm

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1		2669.400	50.03	1.02	51.05	74.00	-22.95	peak			
2		2669.400	33.51	1.02	34.53	54.00	-19.47	AVG			
3		2700.000	42.03	22.58	64.61	74.00	-9.39	peak			
4		2700.000	21.26	22.58	43.84	54.00	-10.16	AVG			
5		4824.000	39.31	7.48	46.79	74.00	-27.21	peak			
6		4824.000	28.17	7.48	35.65	54.00	-18.35	AVG			
7		9817.500	38.60	17.75	56.35	74.00	-17.65	peak			
8		9817.500	27.43	17.75	45.18	54.00	-8.82	AVG			
9		14220.00	28.94	28.32	57.26	74.00	-16.74	peak			
10	*	14220.00	17.59	28.32	45.91	54.00	-8.09	AVG			
11		18000.00	27.74	35.11	62.85	74.00	-11.15	peak			
12		18000.00	7.11	35.11	42.22	54.00	-11.78	AVG			
13		18127.50	38.36	23.23	61.59	74.00	-12.41	peak			

*:Maximum data x:Over limit l:over margin

●Reference Only



Site	Polarization: Horizontal	Temperature: 22 °C
Limit: FCC part 15 (PK)	Power:	Humidity: 60 %
EUT:	Distance: 1m	
M/N: 08-0128-E		
Mode: WIFI(11g)		
Note: CH01(2412MHz) , Antenna 100cm		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree
14		18127.50	20.59	23.23	43.82	54.00	-10.18	AVG		Comment
15		21633.75	37.78	21.28	59.06	74.00	-14.94	peak		
16		21633.75	20.05	21.28	41.33	54.00	-12.67	AVG		
17		25395.00	40.31	19.04	59.35	74.00	-14.65	peak		
18		25395.00	21.54	19.04	40.58	54.00	-13.42	AVG		

*:Maximum data x:Over limit !:over margin

●Reference Only



3.6.2.5 802.11g _ Middle CH

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following

Applicant : Unitech Electronics Co., Ltd.
Model No : RS700
EUT : Fixed Data Collection Terminal
Test Mode : 802.11g CH6 2437.000 (Local Frequency: 2437.000 MHz)
Test Date : 12/22/2008

Please refer to next pager of detail testing data.

Notes:

1. Margin= Amplitude - Limits
2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
3. Height of table for EUT placed: 0.8 Meter.
4. ANT= Antenna height.
5. Amplitude= Reading Amplitude - Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambit noise.
8. All frequencies from 30MHz to 26.5GHz have been tested



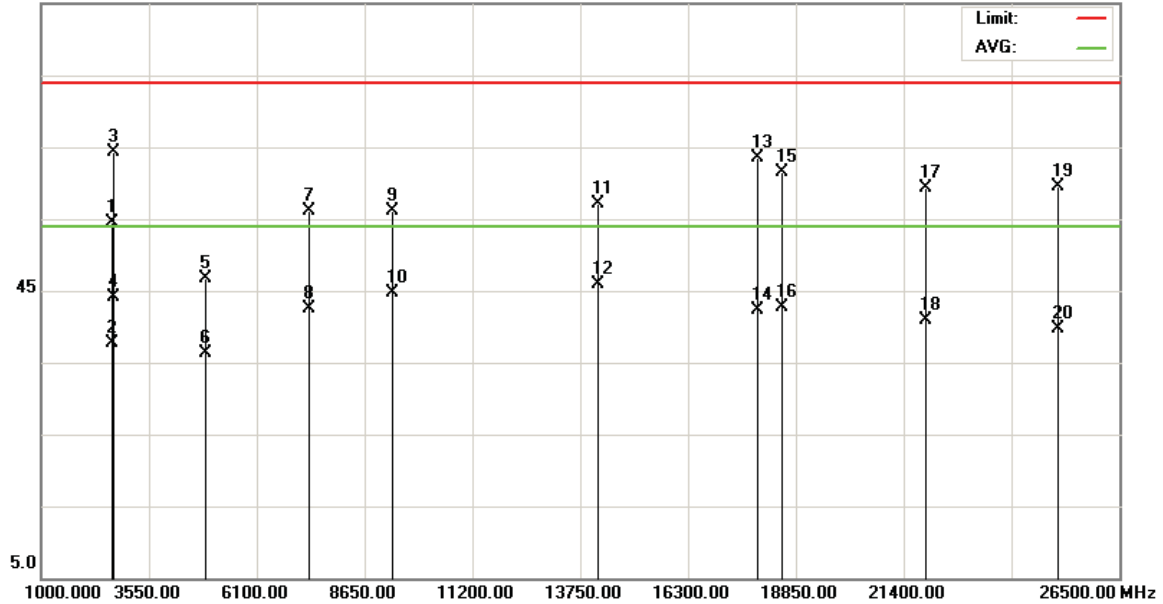
File :RS700(2437)

Data :#14

Date: 2008/12/22

Time: 下午 10:55:08

85.0 dBuV



Site

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH06(2437MHz)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Antenna Height cm	Table Degree degree	Comment
1		2662.600	53.62	0.95	54.57	74.00	-19.43	peak		
2		2662.600	36.77	0.95	37.72	54.00	-16.28	AVG		
3		2700.000	41.70	22.58	64.28	74.00	-9.72	peak		
4		2700.000	21.58	22.58	44.16	54.00	-9.84	AVG		
5		4874.000	38.90	7.72	46.62	74.00	-27.38	peak		
6		4874.000	28.50	7.72	36.22	54.00	-17.78	AVG		
7		7317.250	42.58	13.45	56.03	74.00	-17.97	peak		
8		7317.250	29.08	13.45	42.53	54.00	-11.47	AVG		
9		9288.250	39.40	16.78	56.18	74.00	-17.82	peak		
10		9288.250	27.90	16.78	44.68	54.00	-9.32	AVG		
11		14180.00	38.31	18.85	57.16	74.00	-16.84	peak		
12	*	14180.00	27.12	18.85	45.97	54.00	-8.03	AVG		
13		17920.00	38.57	24.84	63.41	74.00	-10.59	peak		

*:Maximum data x:Over limit !:over margin

●Reference Only



Site	Polarization: <i>Horizontal</i>	Temperature: 22 °C
Limit: FCC part 15 (PK)	Power:	Humidity: 60 %
EUT:	Distance: 1m	
M/N: 08-0128-E		
Mode: WIFI(11g)		
Note: CH06(2437MHz)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree
14		17920.00	17.42	24.84	42.26	54.00	-11.74	AVG		
15		18510.00	38.44	23.10	61.54	74.00	-12.46	peak		
16		18510.00	19.65	23.10	42.75	54.00	-11.25	AVG		
17		21910.00	38.11	21.16	59.27	74.00	-14.73	peak		
18		21910.00	19.70	21.16	40.86	54.00	-13.14	AVG		
19		25033.75	40.23	19.36	59.59	74.00	-14.41	peak		
20		25033.75	20.40	19.36	39.76	54.00	-14.24	AVG		

*:Maximum data x:Over limit !:over margin

●Reference Only



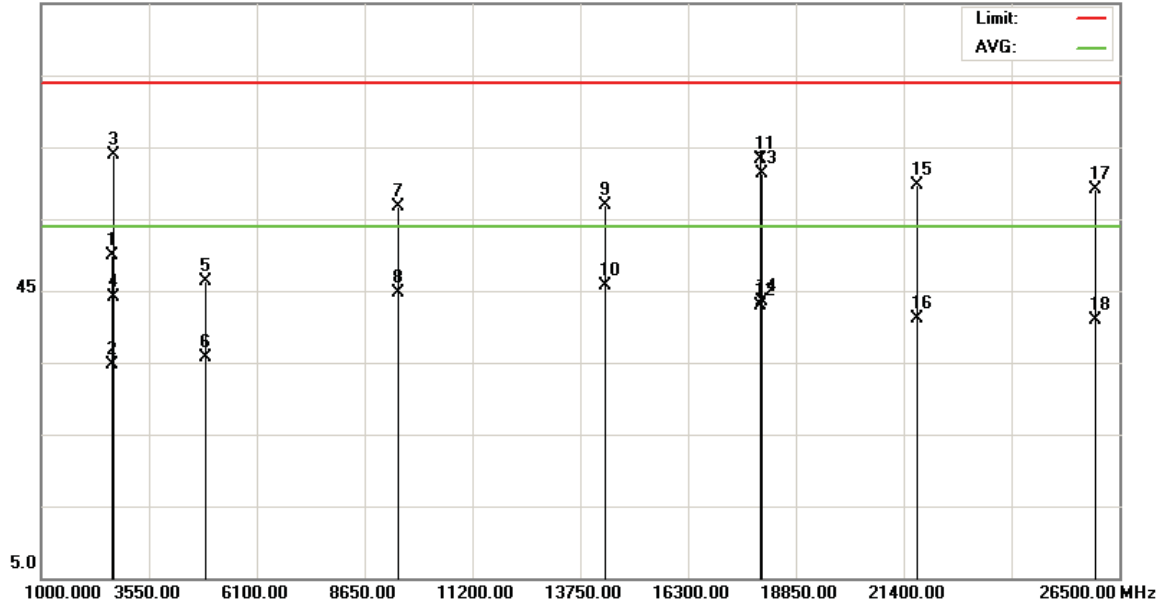
File :RS700(2437)_tmp

Data :#5

Date: 2008/12/22

Time: 下午 10:59:10

85.0 dBuV



Site

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH06(2437MHz) , Antenna100cm

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1		2672.800	48.86	1.02	49.88	74.00	-24.12	peak			
2		2672.800	33.73	1.02	34.75	54.00	-19.25	AVG			
3		2700.000	41.39	22.58	63.97	74.00	-10.03	peak			
4		2700.000	21.58	22.58	44.16	54.00	-9.84	AVG			
5		4874.000	38.59	7.72	46.31	74.00	-27.69	peak			
6		4874.000	28.07	7.72	35.79	54.00	-18.21	AVG			
7		9416.000	39.54	17.07	56.61	74.00	-17.39	peak			
8		9416.000	27.69	17.07	44.76	54.00	-9.24	AVG			
9		14320.00	28.84	28.11	56.95	74.00	-17.05	peak			
10	*	14320.00	17.66	28.11	45.77	54.00	-8.23	AVG			
11		18000.00	28.11	35.11	63.22	74.00	-10.78	peak			
12		18000.00	7.70	35.11	42.81	54.00	-11.19	AVG			
13		18021.25	37.98	23.28	61.26	74.00	-12.74	peak			

*:Maximum data x:Over limit !:over margin

●Reference Only



Site	Polarization: Horizontal	Temperature: 22 °C
Limit: FCC part 15 (PK)	Power:	Humidity: 60 %
EUT:	Distance: 1m	
M/N: 08-0128-E		
Mode: WIFI(11g)		
Note: CH06(2437MHz) , Antenna100cm		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree
14		18021.25	20.23	23.28	43.51	54.00	-10.49	AVG		
15		21697.50	38.42	21.24	59.66	74.00	-14.34	peak		
16		21697.50	19.94	21.24	41.18	54.00	-12.82	AVG		
17		25926.25	40.49	18.62	59.11	74.00	-14.89	peak		
18		25926.25	22.26	18.62	40.88	54.00	-13.12	AVG		

*:Maximum data x:Over limit !:over margin

●Reference Only



3.6.2.6 802.11g _ High CH

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Applicant : Unitech Electronics Co., Ltd.
Model No : RS700
EUT : Fixed Data Collection Terminal
Test Mode : 802.11g CH11 2462.000 (Local Frequency: 2462.000 MHz)
Test Date : 12/22/2008

Please refer to next pager of detail testing data.

Notes:

1. Margin= Amplitude - Limits
2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
3. Height of table for EUT placed: 0.8 Meter.
4. ANT= Antenna height.
5. Amplitude= Reading Amplitude - Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambit noise.
8. All frequencies from 30MHz to 26.5GHz have been tested



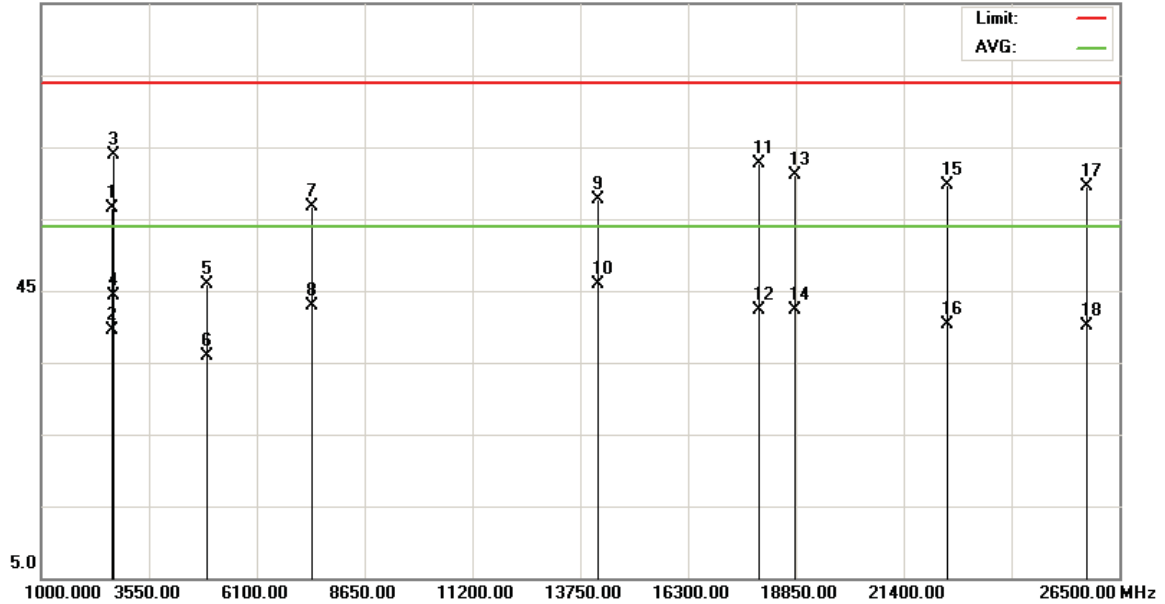
File :RS700(2462)

Data :#14

Date: 2008/12/22

Time: 下午 11:06:30

85.0 dBuV



Site

Polarization: **Vertical**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH11(2462MHz) · Antenna 100cm

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Antenna Height cm	Table Degree degree	Comment
1		2676.200	55.50	1.02	56.52	74.00	-17.48	peak		
2		2676.200	38.49	1.02	39.51	54.00	-14.49	AVG		
3		2700.000	41.25	22.58	63.83	74.00	-10.17	peak		
4		2700.000	21.76	22.58	44.34	54.00	-9.66	AVG		
5		4924.000	38.23	7.65	45.88	74.00	-28.12	peak		
6		4924.000	28.25	7.65	35.90	54.00	-18.10	AVG		
7		7390.250	43.07	13.60	56.67	74.00	-17.33	peak		
8		7390.250	29.34	13.60	42.94	54.00	-11.06	AVG		
9		14180.00	29.27	28.39	57.66	74.00	-16.34	peak		
10	*	14180.00	17.60	28.39	45.99	54.00	-8.01	AVG		
11		17960.00	28.35	34.38	62.73	74.00	-11.27	peak		
12		17960.00	7.92	34.38	42.30	54.00	-11.70	AVG		
13		18807.50	38.01	23.16	61.17	74.00	-12.83	peak		

*:Maximum data x:Over limit l:over margin

●Reference Only



Site	Polarization: Vertical	Temperature: 22 °C
Limit: FCC part 15 (PK)	Power:	Humidity: 60 %
EUT:	Distance: 1m	
M/N: 08-0128-E		
Mode: WIFI(11g)		
Note: CH11(2462MHz) , Antenna 100cm		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree
14		18807.50	19.20	23.16	42.36	54.00	-11.64	AVG		
15		22420.00	38.79	20.92	59.71	74.00	-14.29	peak		
16		22420.00	19.43	20.92	40.35	54.00	-13.65	AVG		
17		25713.75	40.76	18.82	59.58	74.00	-14.42	peak		
18		25713.75	21.30	18.82	40.12	54.00	-13.88	AVG		

*:Maximum data x:Over limit !:over margin

●Reference Only



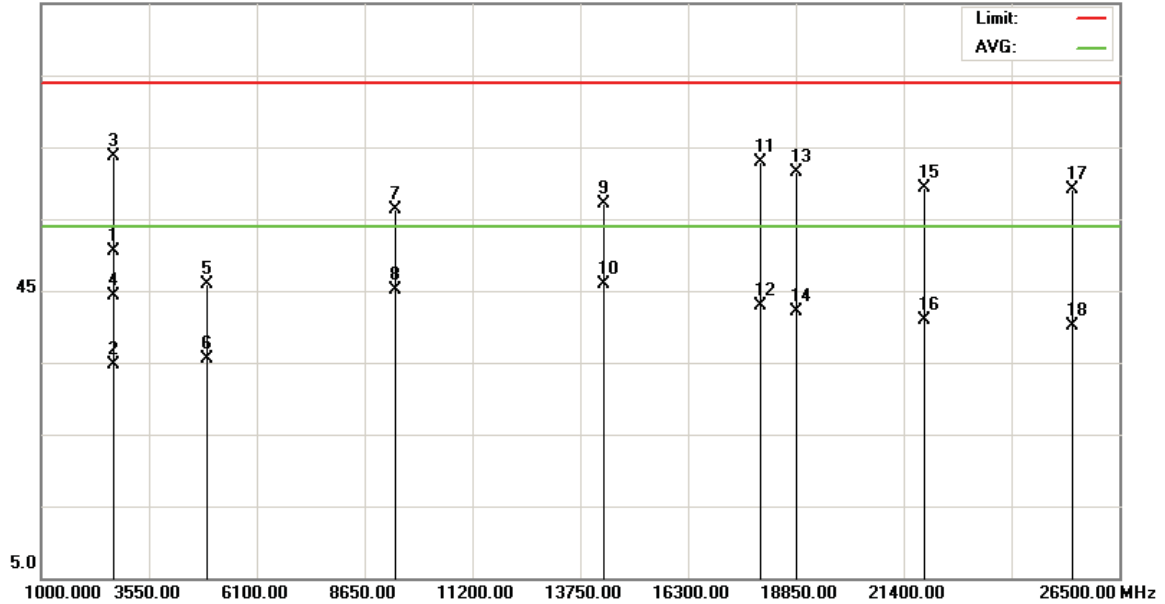
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Data :#5

Date: 2008/12/22

Time: 下午 11:10:17

85.0 dBuV



Site

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH11(2462MHz) · Antenna 100cm

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Antenna Height cm	Table Degree degree	Comment
1		2689.800	49.56	1.03	50.59	74.00	-23.41	peak		
2		2689.800	33.74	1.03	34.77	54.00	-19.23	AVG		
3		2700.000	41.19	22.58	63.77	74.00	-10.23	peak		
4		2700.000	21.70	22.58	44.28	54.00	-9.72	AVG		
5		4924.000	38.24	7.65	45.89	74.00	-28.11	peak		
6		4924.000	27.90	7.65	35.55	54.00	-18.45	AVG		
7		9343.000	39.44	16.93	56.37	74.00	-17.63	peak		
8		9343.000	28.14	16.93	45.07	54.00	-8.93	AVG		
9		14300.00	28.90	28.15	57.05	74.00	-16.95	peak		
10	*	14300.00	17.72	28.15	45.87	54.00	-8.13	AVG		
11		18000.00	27.70	35.11	62.81	74.00	-11.19	peak		
12		18000.00	7.75	35.11	42.86	54.00	-11.14	AVG		
13		18871.25	38.33	23.15	61.48	74.00	-12.52	peak		

*:Maximum data x:Over limit l:over margin

●Reference Only



Site	Polarization: Horizontal	Temperature: 22 °C
Limit: FCC part 15 (PK)	Power:	Humidity: 60 %
EUT:	Distance: 1m	
M/N: 08-0128-E		
Mode: WIFI(11g)		
Note: CH11(2462MHz) , Antenna 100cm		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree
14		18871.25	19.05	23.15	42.20	54.00	-11.80	AVG		
15		21867.50	38.13	21.19	59.32	74.00	-14.68	peak		
16		21867.50	19.79	21.19	40.98	54.00	-13.02	AVG		
17		25395.00	40.04	19.04	59.08	74.00	-14.92	peak		
18		25395.00	21.00	19.04	40.04	54.00	-13.96	AVG		

*:Maximum data x:Over limit !:over margin

●Reference Only

4. Maximum Conducted Output Power Requirements

4.1 Test Condition & Setup:

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.

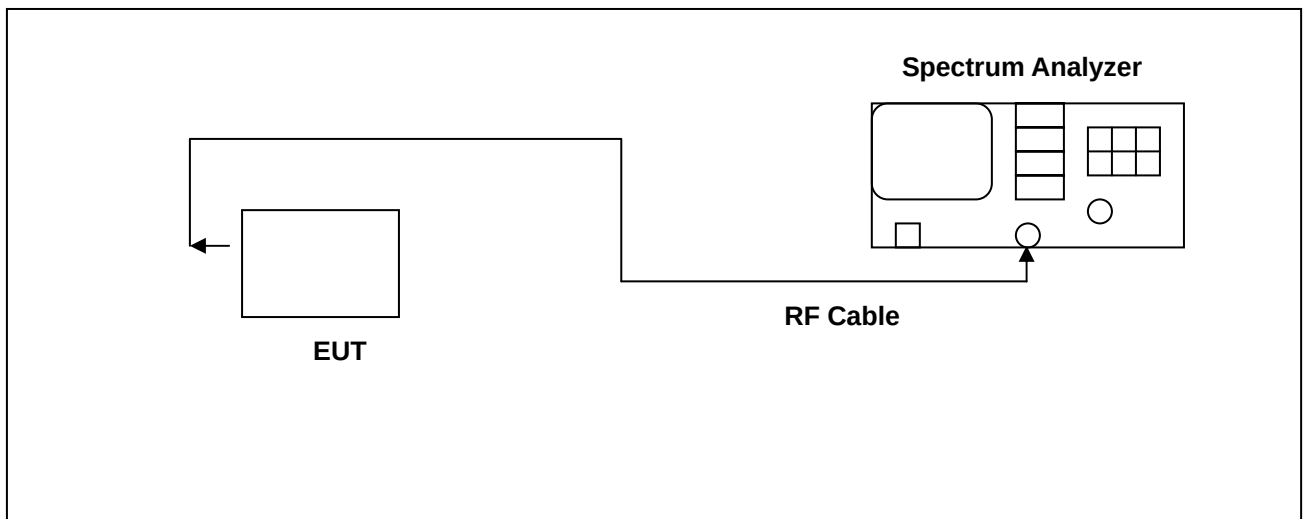
The tests below are run with the EUT's transmitter set at high power in TX mode. The EUT is needed to force selection of output power level and channel number. While testing, EUT was set to transmit continuous RS700y. Remove the Subjective device's antenna and connect the RF output port to spectrum analyzer. The maximum peak output power shall not exceed 1 watt.

Use a direct connection between the antenna port of transmitter and the spectrum Analyzer, for prevent the spectrum analyzer input attenuation 40-50 dB. Set the RBW Bandwidth of the emission or use a channel power meter mode.

For antennas with gains of 6 dBi or less, maximum allowed transmitter output is 1 watt (+30 dBm). For antennas with gains greater than 6 dBi, transmitter output level must be decreased by an amount equal to $(\text{GAIN} - 6)/3$ dBm.

The antenna port of the EUT was connected to the input of a power meter. Power was read directly and cable loss correction was added to the reading to obtain power at the EUT antenna terminals.

4.2 Test Instruments Configuration:





4.3 Test Equipment List:

Describe	Manufacturer	Model	Serial Number	Calibration	
				Cal. Date	Due Date
Spectrum Analyzer	Agilent	E4445A	MY46181986	May. 07, 2008	May. 07, 2009

4.4 Test Result:

802.11b

Frequency (MHz)	Output (dBm)	Required Limit
2412	18.42	<30dBm
2437	17.89	<30dBm
2462	19.31	<30dBm

802.11g

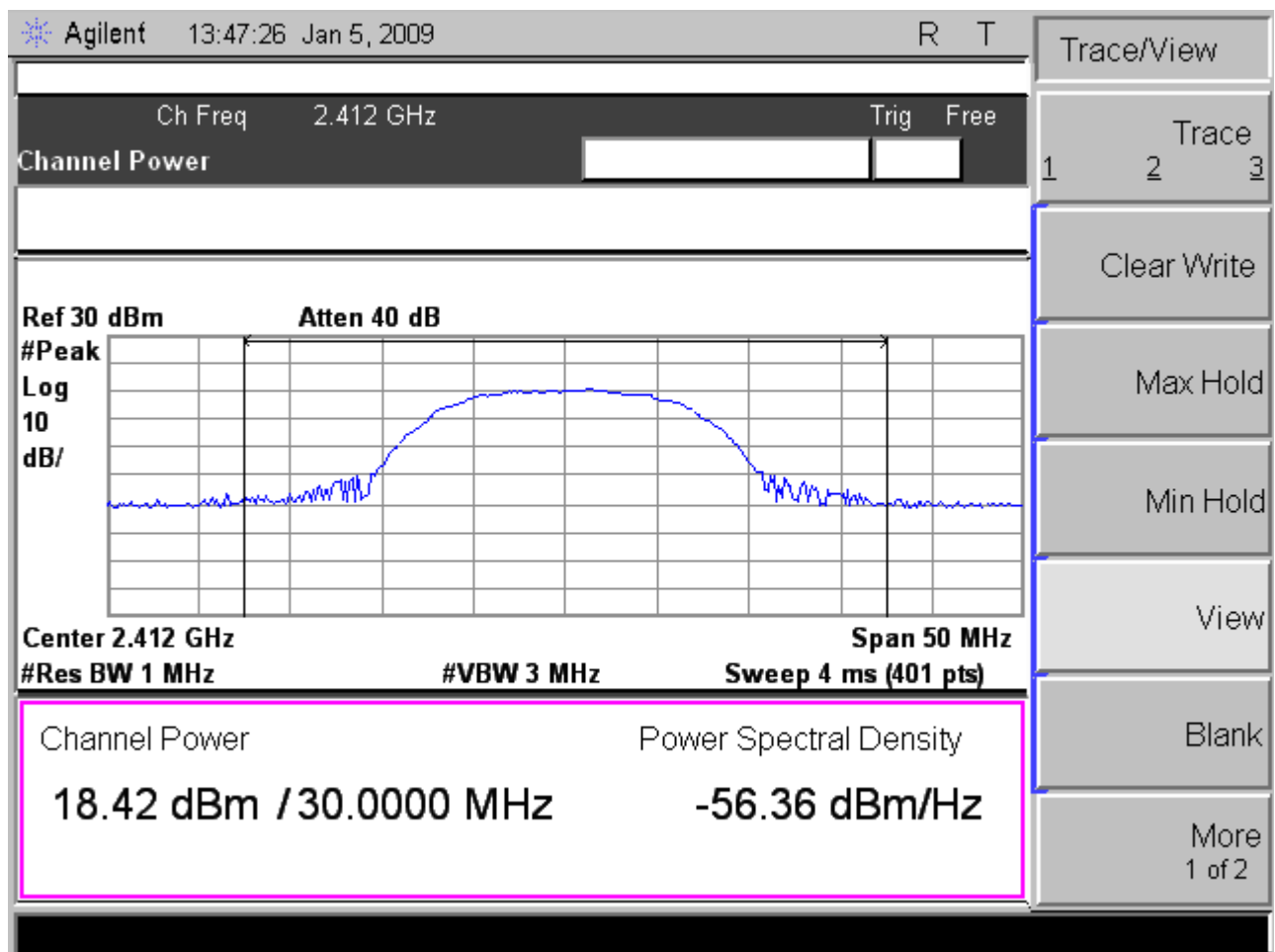
Frequency (MHz)	Output (dBm)	Required Limit
2412	16.96	<30dBm
2437	16.82	<30dBm
2462	18.43	<30dBm

Note: Test Graphs See next page.



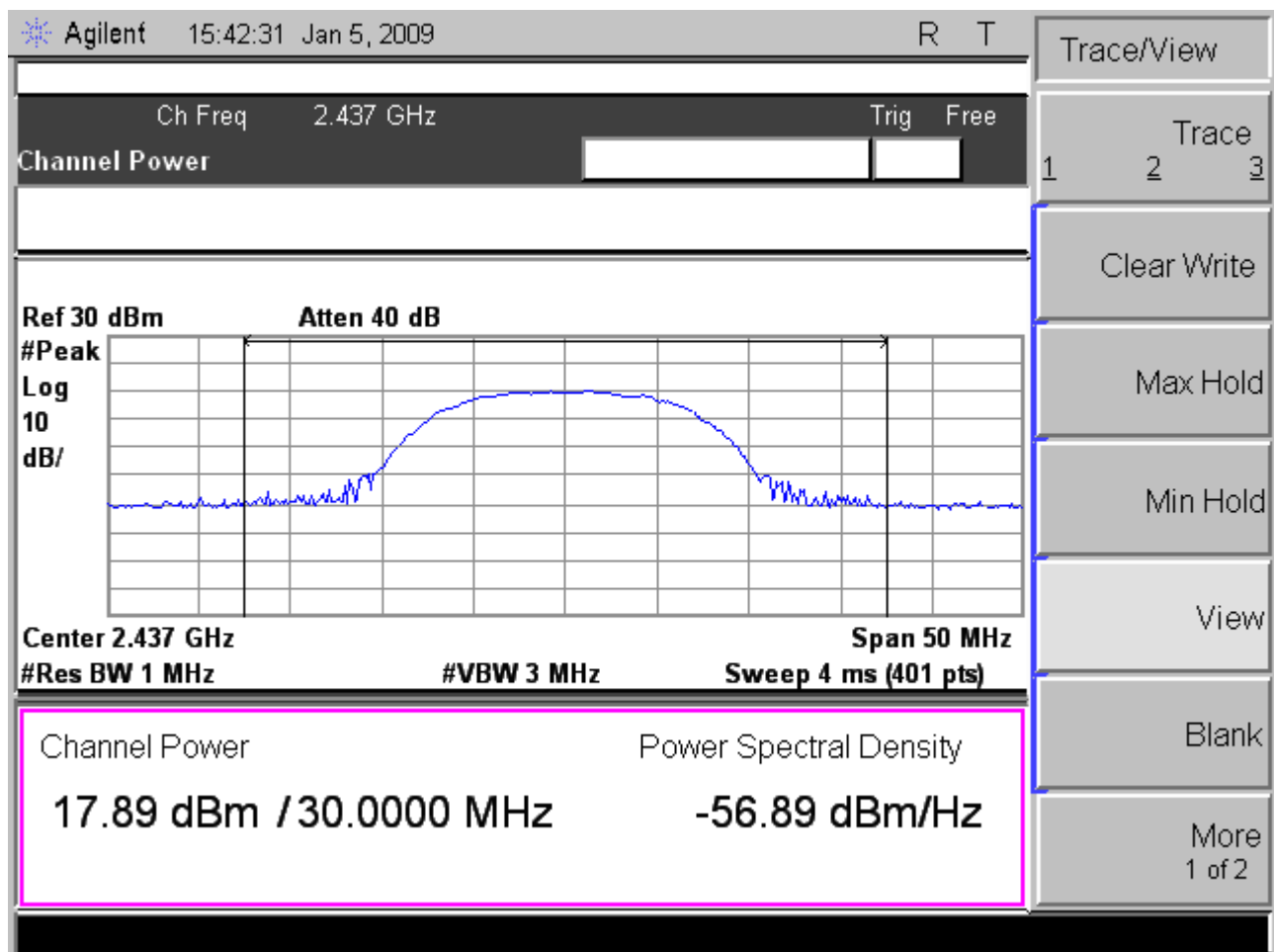
4.5 Test Graphs

802.11b CH1 (2412MHz)



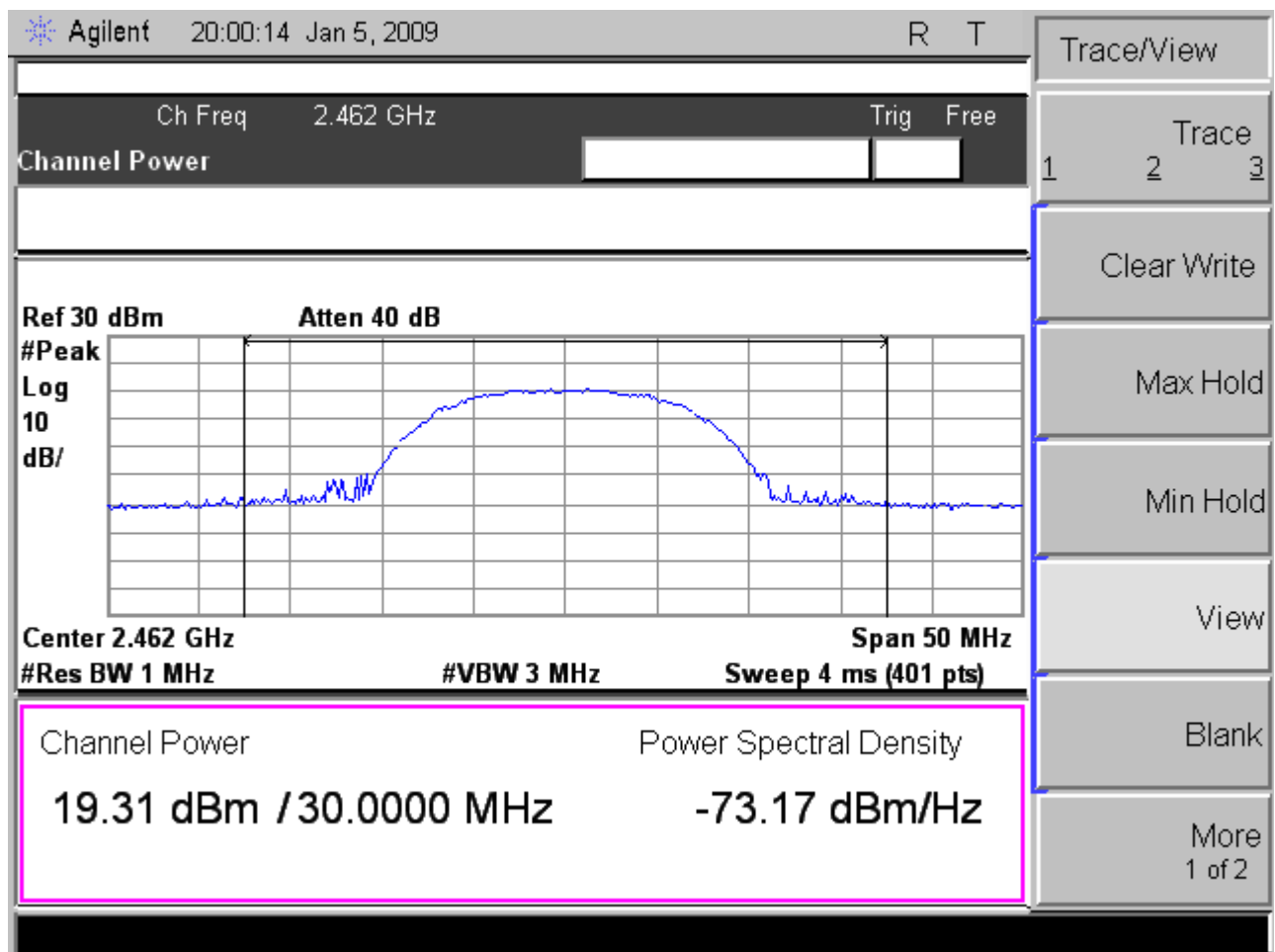


802.11b CH6 (2437MHz)



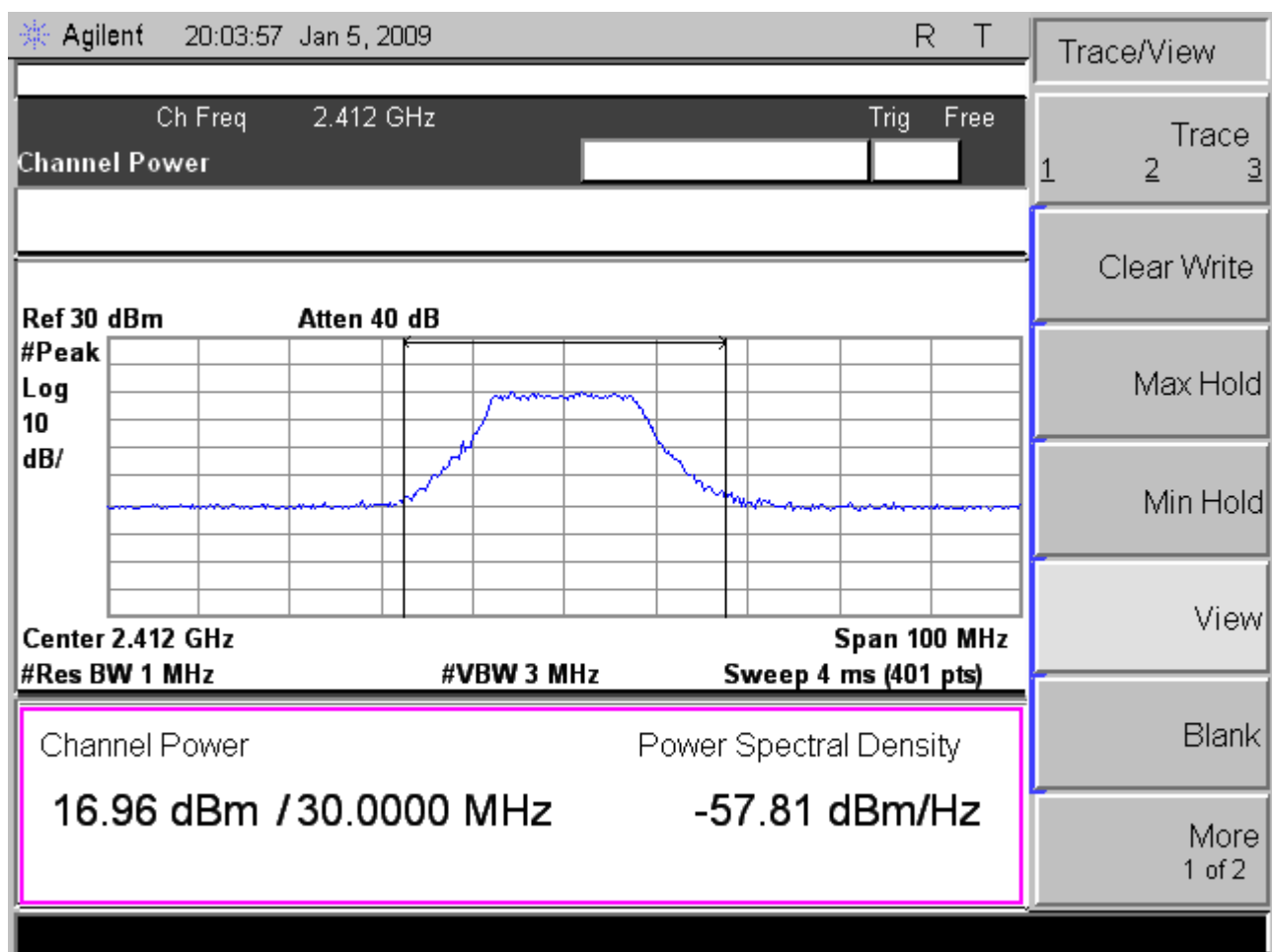


802.11b CH11 (2462MHz)



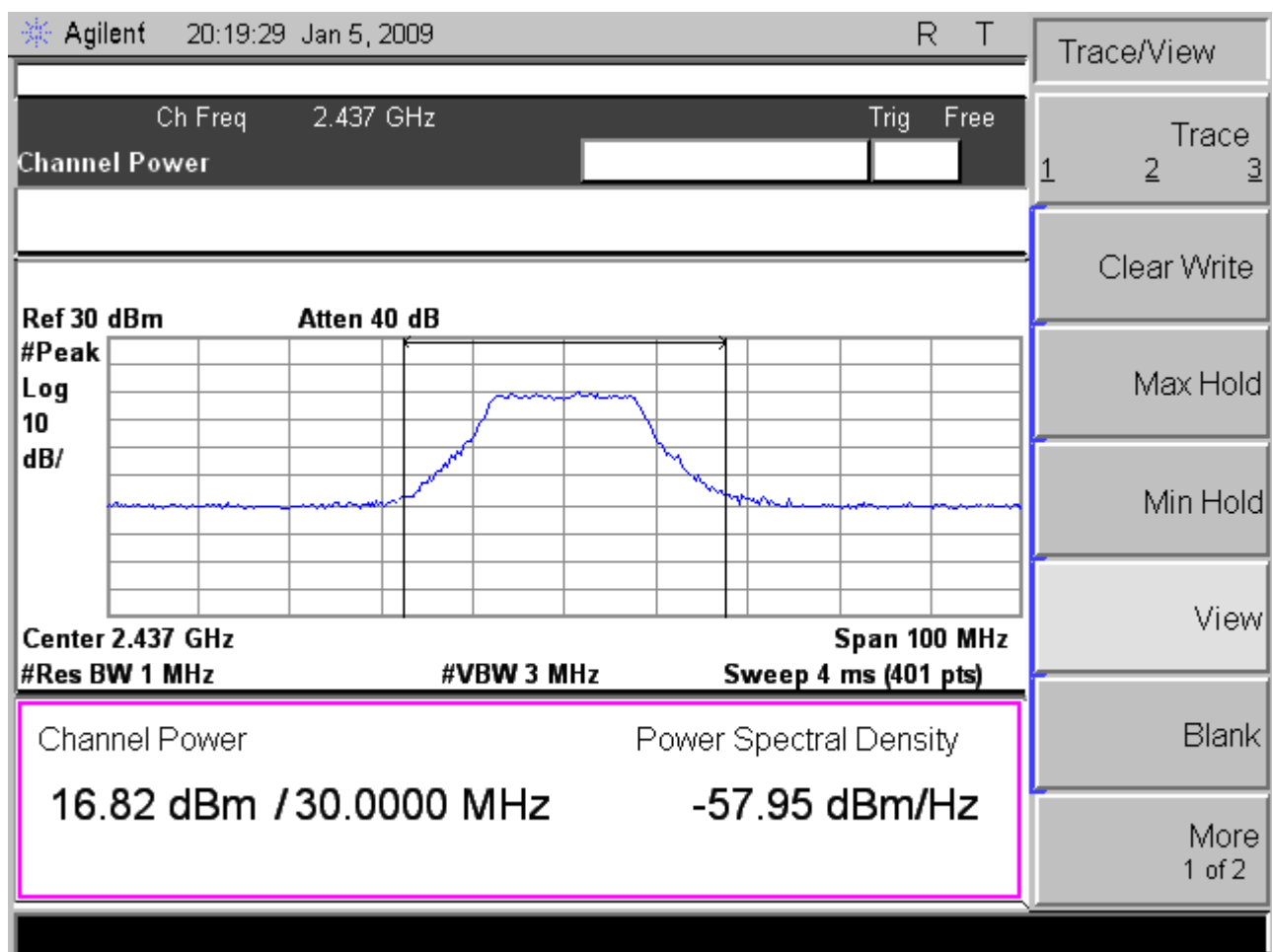


802.11g CH1 (2412MHz)



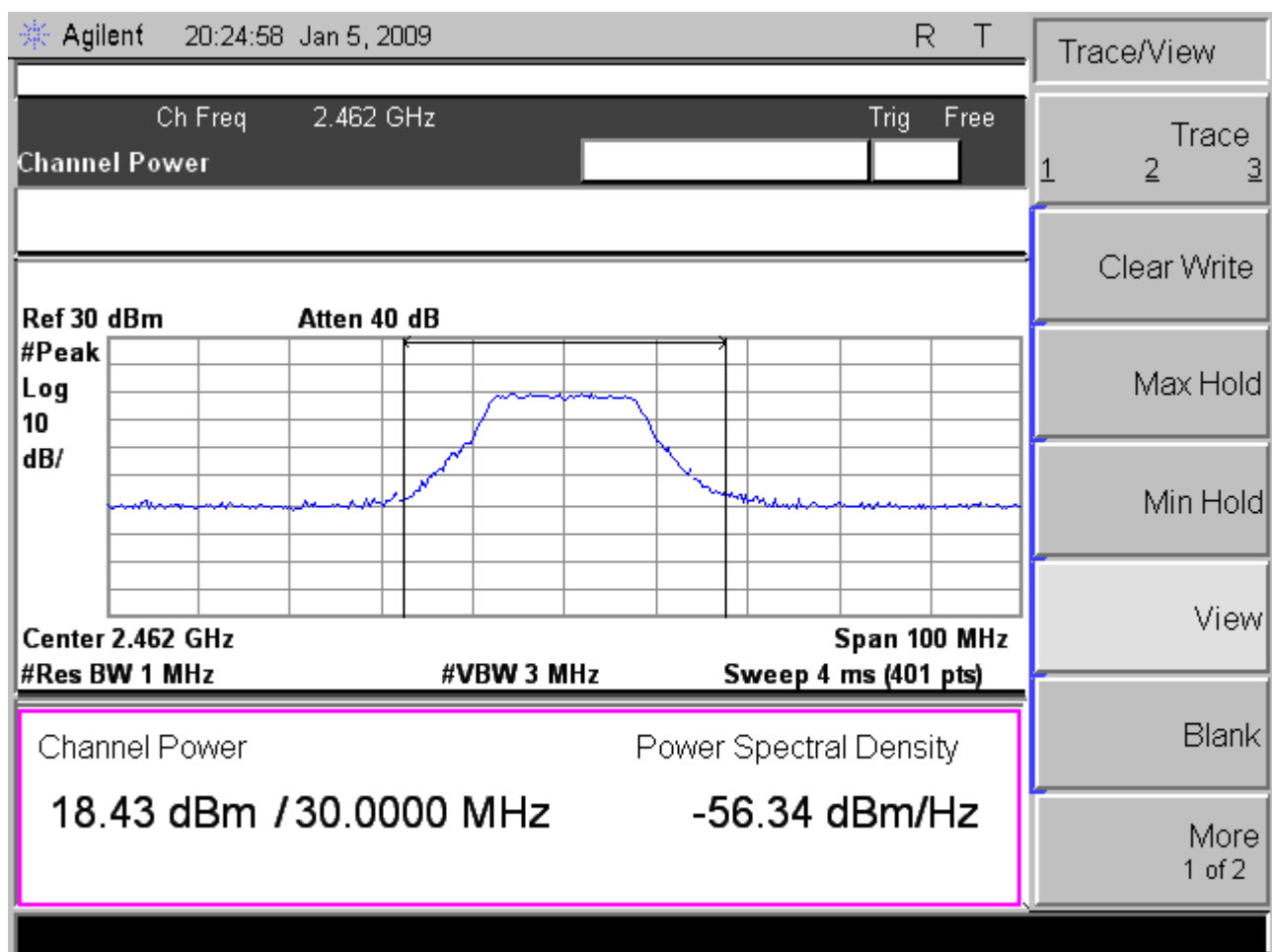


802.11g CH6 (2437MHz)





802.11g CH11 (2462MHz)





5. Minimum 6dB RF Bandwidth Requirements

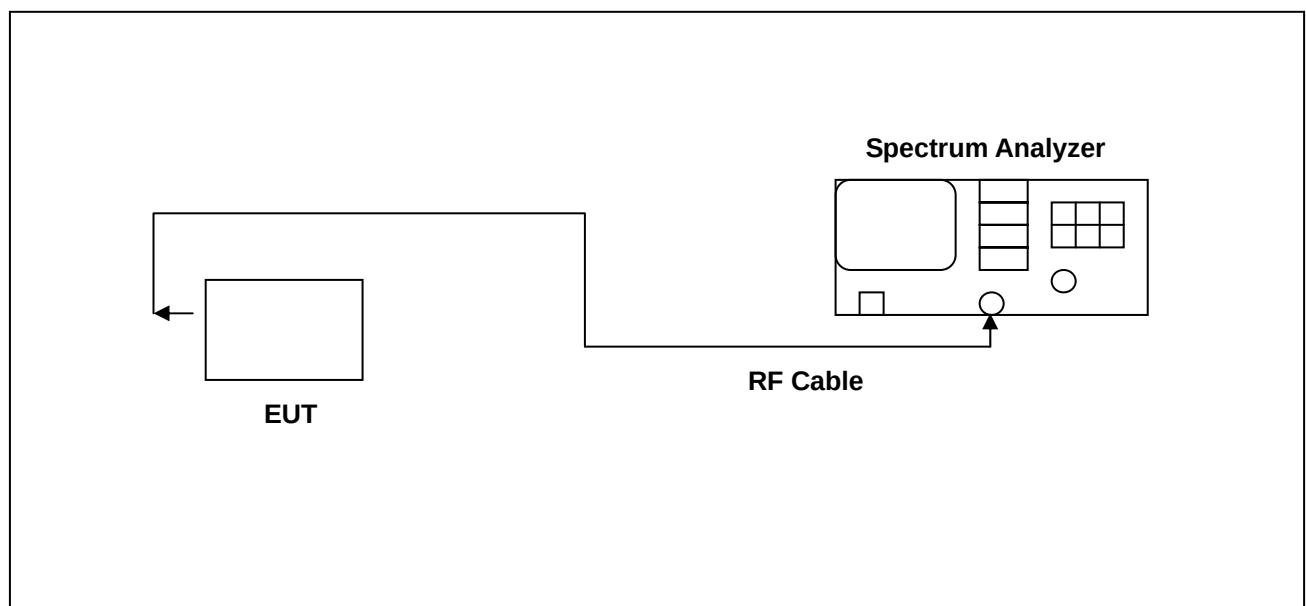
5.1 Test Condition & Setup:

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.

The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer RES BW was set to 100 kHz. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A PEAK output reading was taken, a DISPLAY line was drawn 6 dB lower than PEAK level. The 6 dB bandwidth was determined from where the channel output spectrum intersected the display line.

The test was performed at 3 channels (Channel 1, 6, 11)

5.2 Test Instruments Configuration:



5.3 Test Equipment List:

Describe	Manufacturer	Model	Serial Number	Calibration	
				Cal. Date	Due Date
Spectrum Analyzer	Agilent	E4445A	MY46181986	May. 07, 2008	May. 07, 2009



5.4 Test Result:

802.11b

Frequency (MHz)	Min. 6dB Bandwidth (MHz)	Required Limit
2412	9.875	> 500 KHz
2437	10.750	> 500 KHz
2462	9.625	> 500 KHz

802.11g

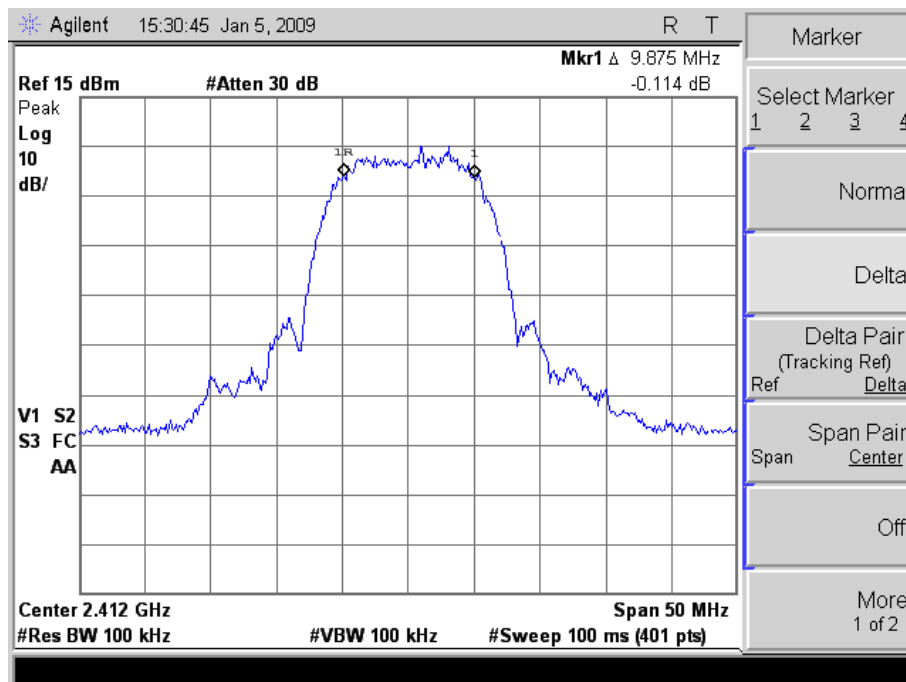
Frequency (MHz)	Min. 6dB Bandwidth (MHz)	Required Limit
2412	16.625	> 500 KHz
2437	16.625	> 500 KHz
2462	16.563	> 500 KHz

Note: Test Graphs See next page.

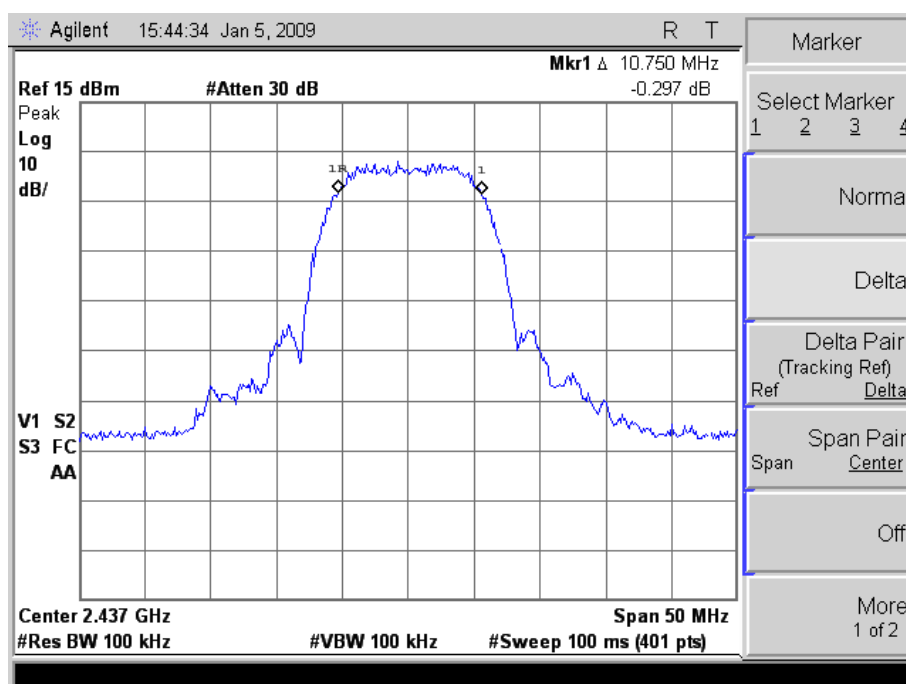


5.5 Test Graphs

802.11b (2412MHz)

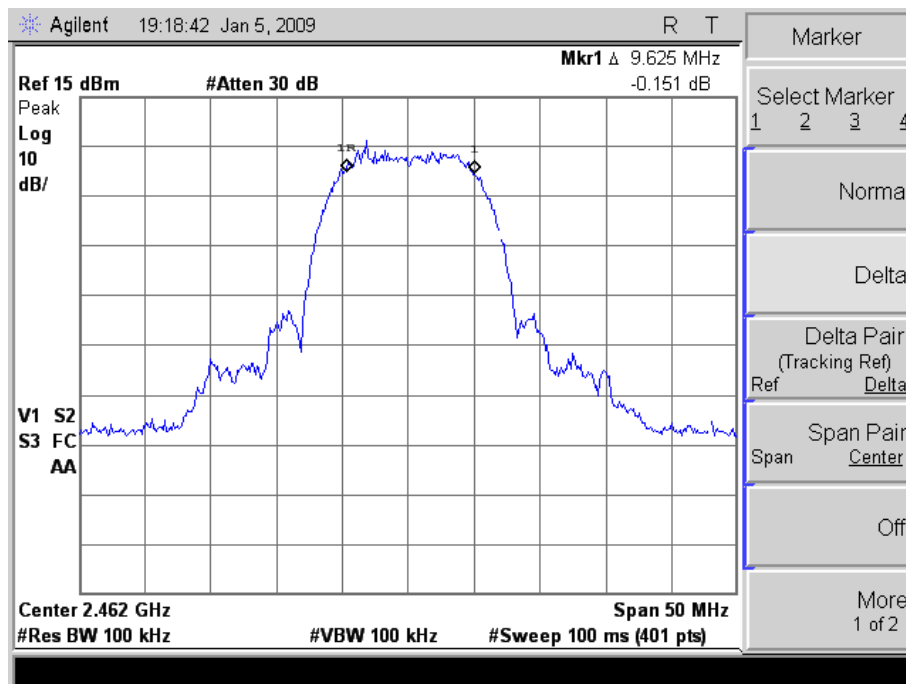


802.11b (2437MHz)



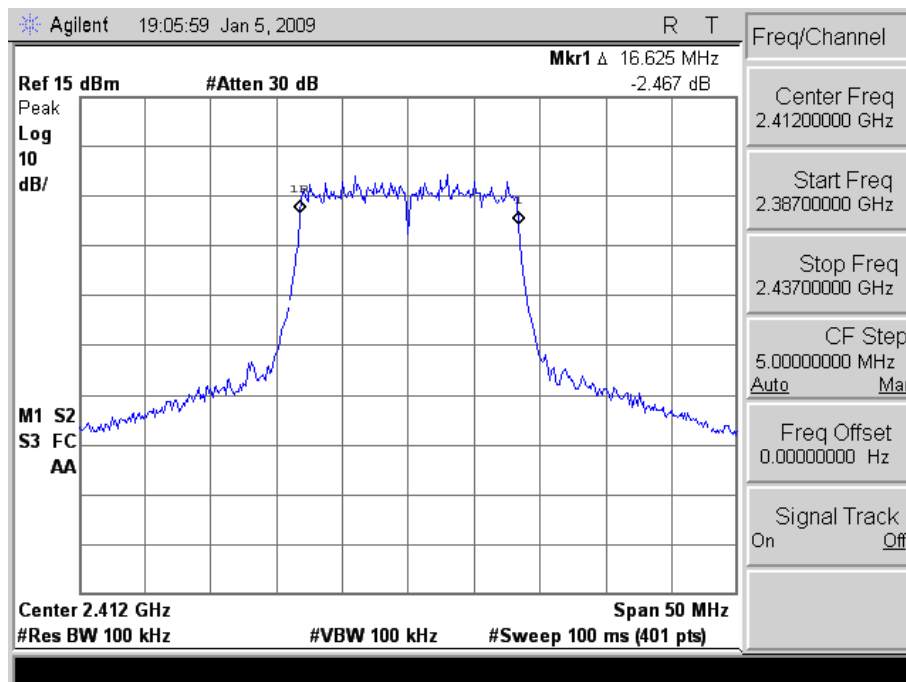


802.11b (2462MHz)

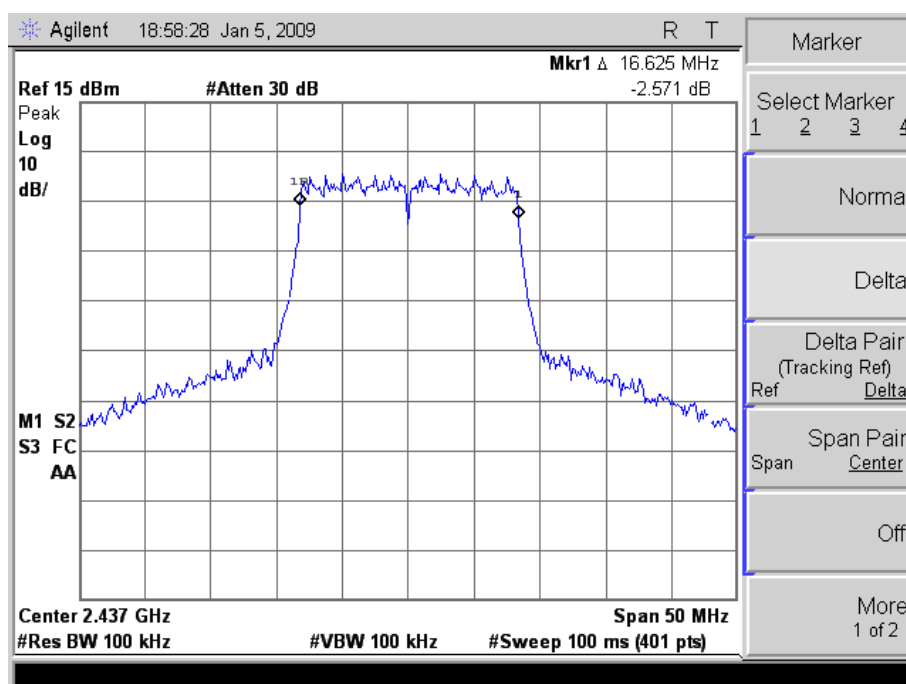




802.11g (2412MHz)

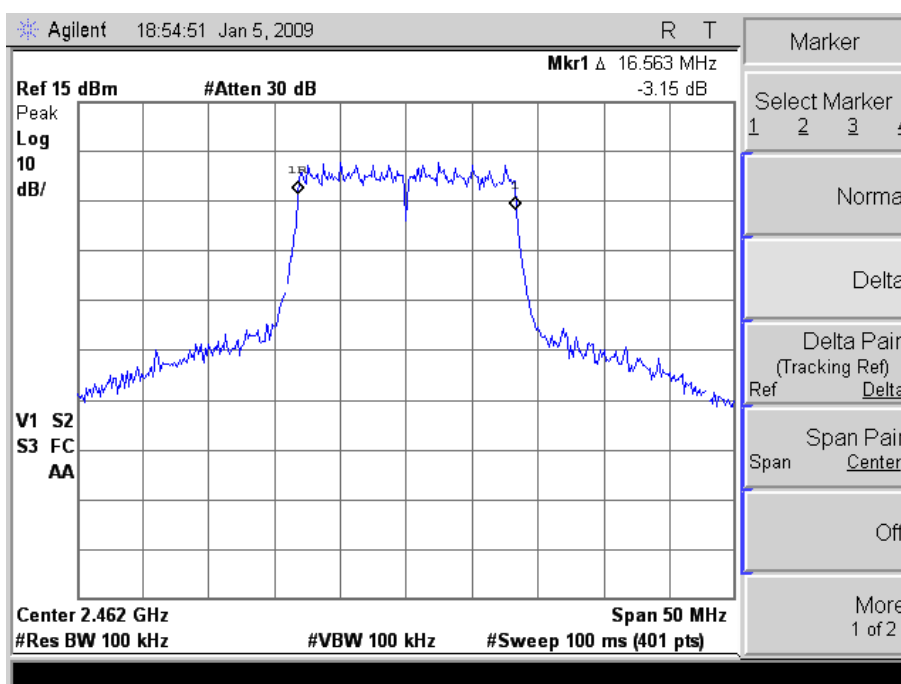


802.11g (2437MHz)





802.11g (2462MHz)





6. Maximum Power Density Requirements

6.1 Test Condition & Setup:

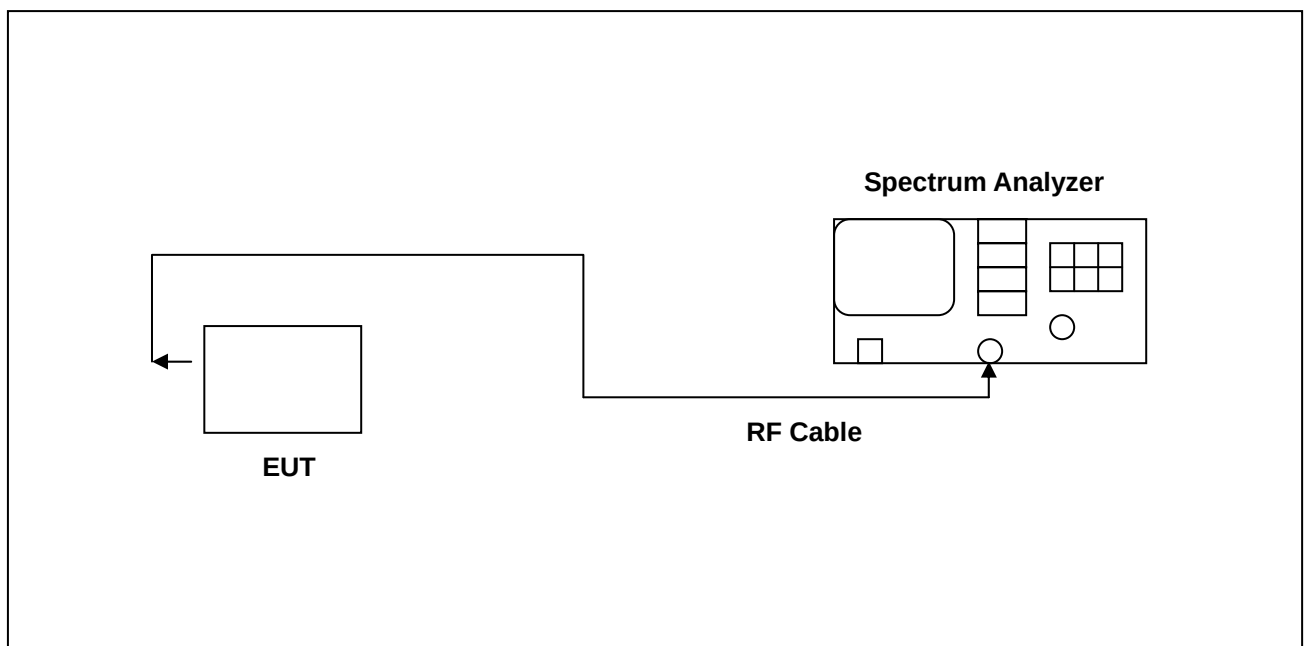
The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The spectrum analyzer RES BW was set to 3 kHz. The START and STOP frequencies were set to the band edges of the maximum output pass band. If there is no clear maximum amplitude in any given portion of the band, it may be necessary to make measurements at a number of bands defined by several START and STOP frequency pairs. The specification calls for a 1 second interval at each 3 kHz bandwidth; total SWEEP TIME is calculated as follows:

$$\text{SWEEP TIME (SEC)} = (\text{Fstop, kHz} - \text{Fstart, kHz}) / 3 \text{ kHz}$$

Antenna output of the EUT was coupled directly to spectrum analyzer; if an external attenuator and/or cable was used, these losses are compensated for with the analyzer OFFSET function.

6.2 Test Instruments Configuration:





6.3 Test Equipment List:

Describe	Manufacturer	Model	Serial Number	Calibration	
				Cal. Date	Due Date
Spectrum Analyzer	Agilent	E4445A	MY46181986	May. 07, 2008	May. 07, 2009

6.4 Test Result:

802.11b

Frequency (MHz)	Power Density (dBm)	Required Limit
2412	-9.473	<8dBm
2437	-10.57	<8dBm
2462	-11.68	<8dBm

802.11g

Frequency (MHz)	Power Density (dBm)	Required Limit
2412	-17.32	<8dBm
2437	-13.63	<8dBm
2462	-13.07	<8dBm

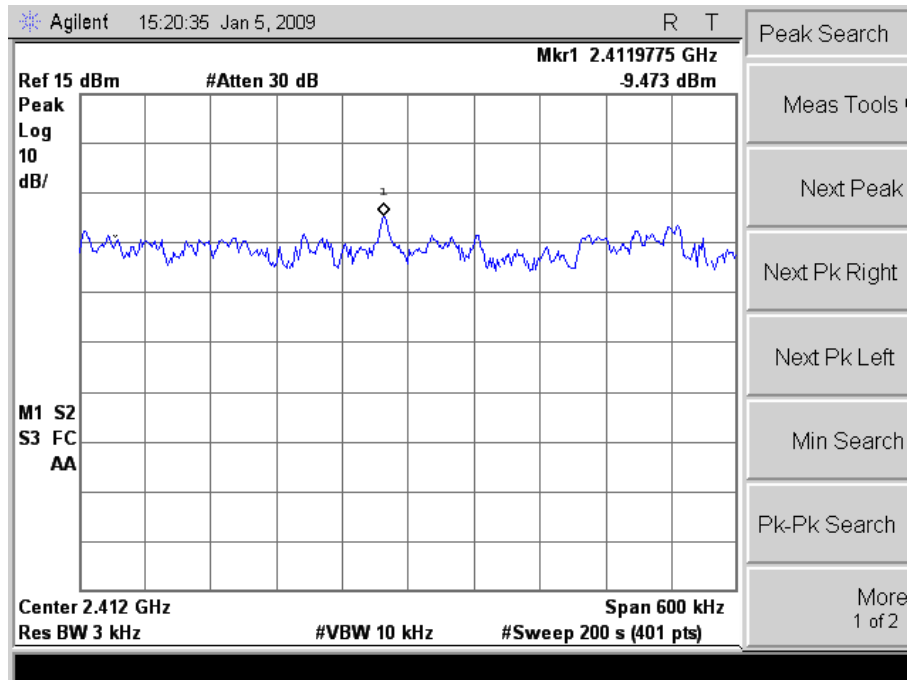
Note:

1. Frequency Span= 600 kHz
2. Sweep Time = Frequency Span/3 kHz=200secs
3. Test Graphs See next page.

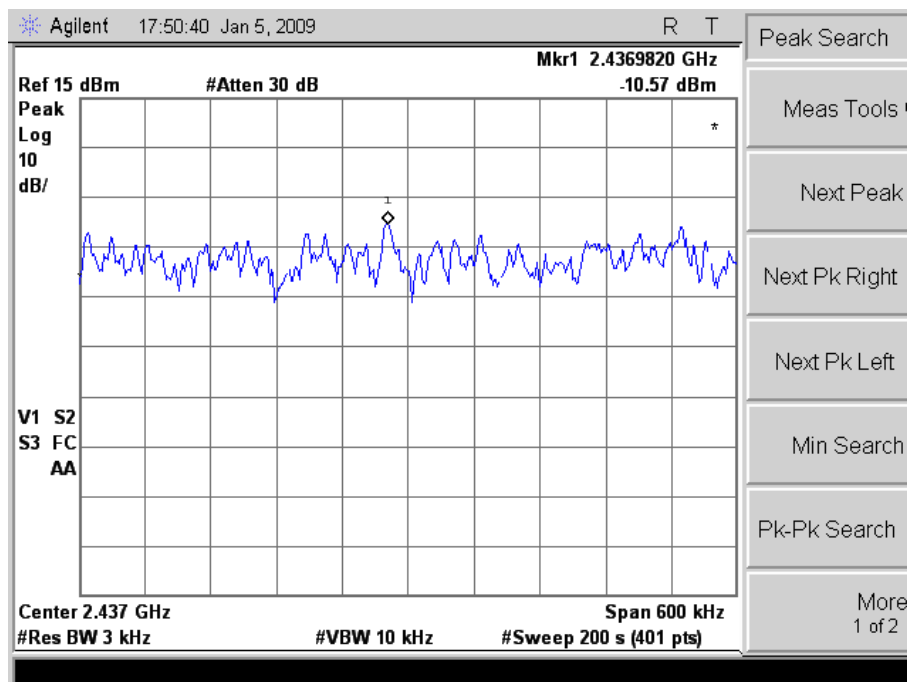


6.5 Test Graphs

802.11b (2412MHz)

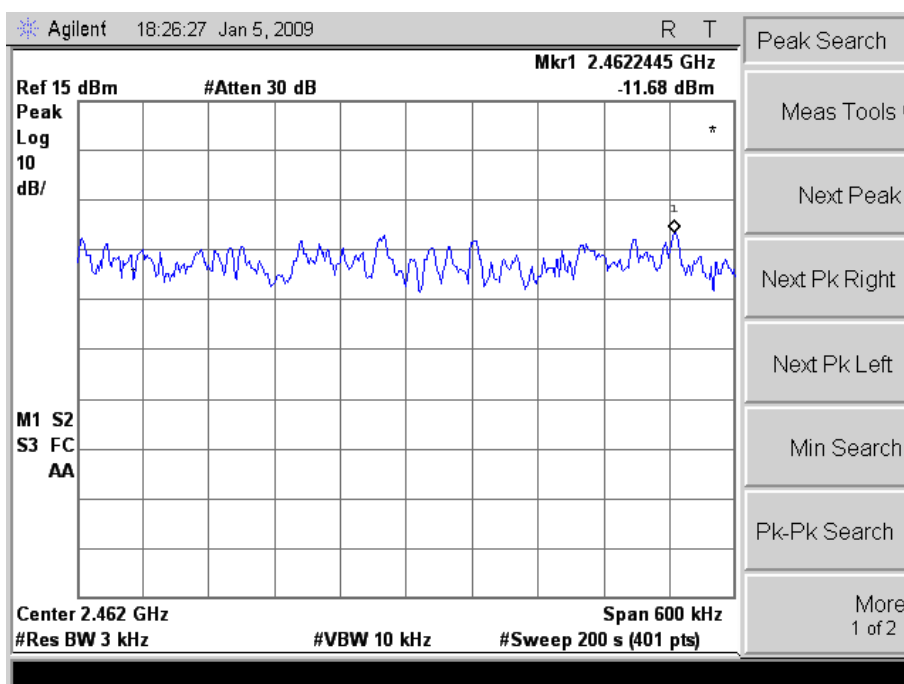


802.11b (2437MHz)



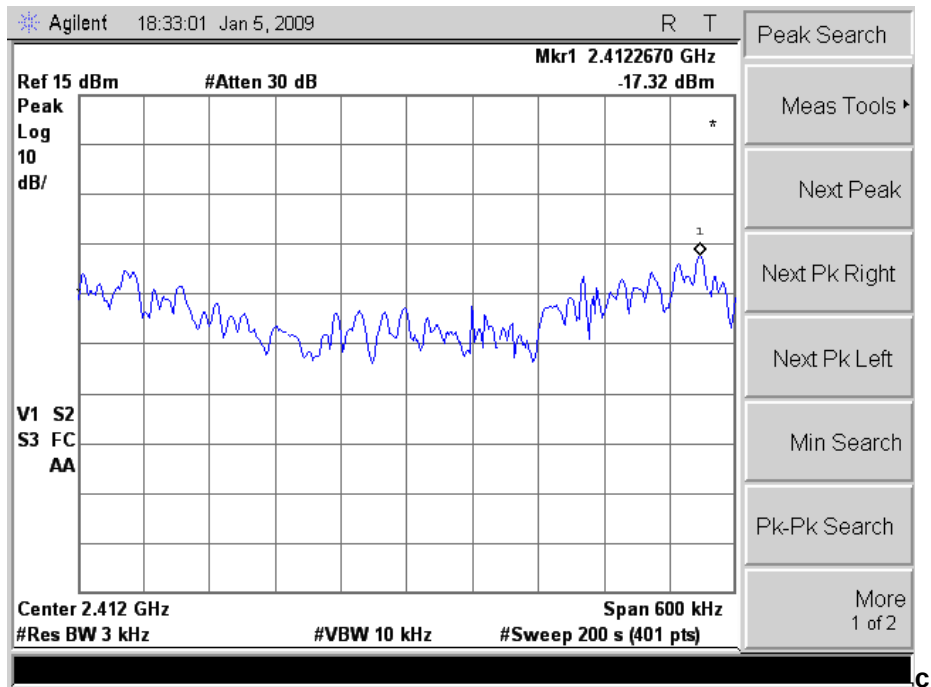


802.11b (2462MHz)

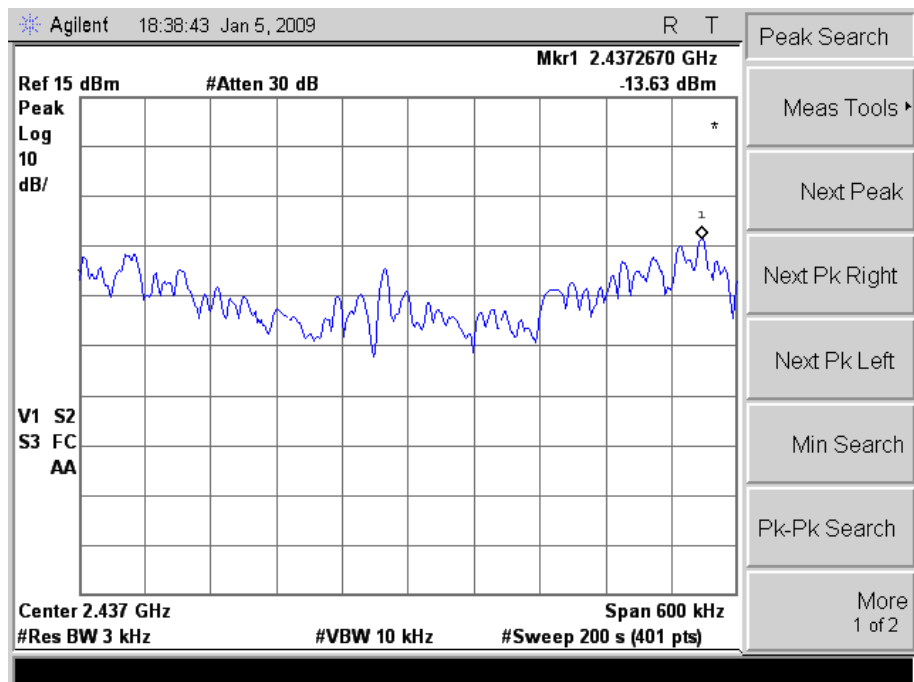




802.11g (2412MHz)

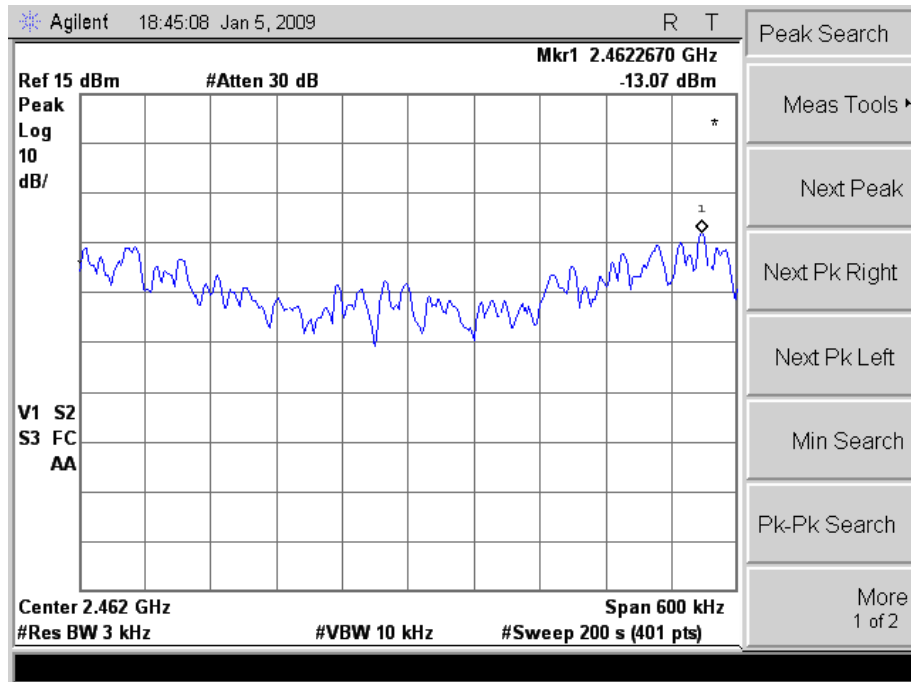


802.11g (2437MHz)





802.11g (2462MHz)



7. Out of Band Conducted Emissions Requirements

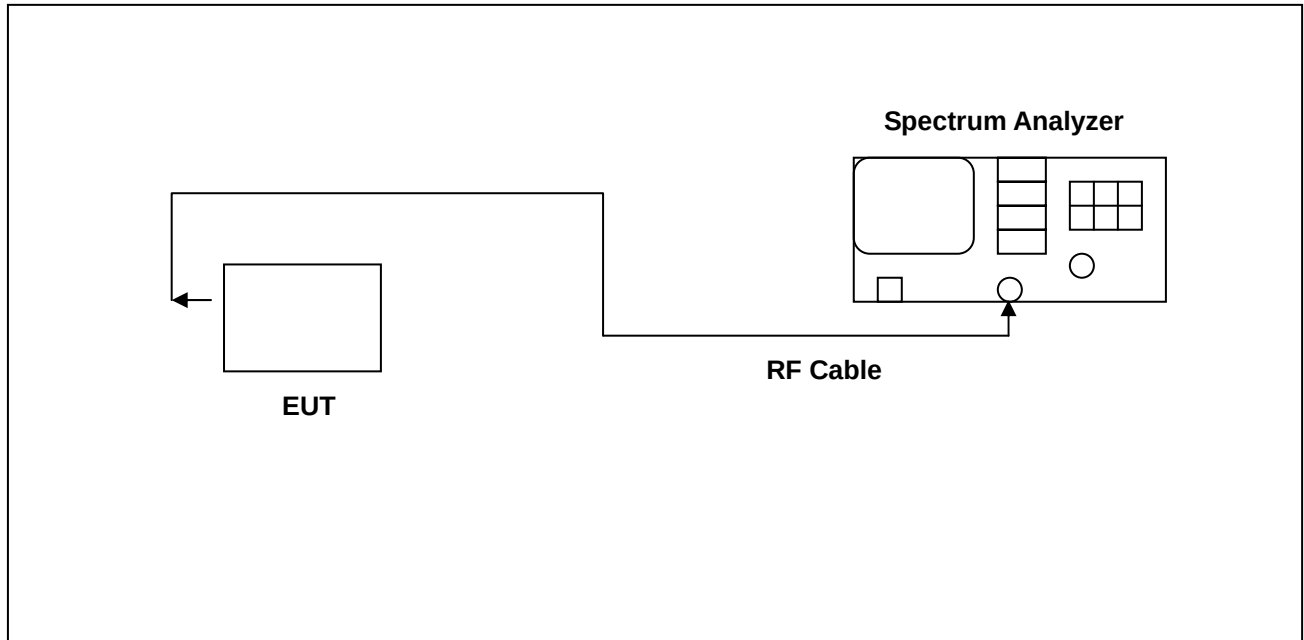
7.1 Test Condition & Setup:

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.

In any 100 kHz bandwidth outside the EUT pass band, the RF power produced by the modulation products of the spreading sequence, the information sequence, and the carrier frequency shall be at least 20 dB below that of the maximum in-band 100 kHz emission, antenna output of the EUT was coupled directly to spectrum analyzer; if an external attenuator and/or cable was used, these losses are compensated for with the analyzer OFFSET function.

All other types of emissions from the EUT shall meet the general limits for radiated frequencies outside the pass band. The test was performed at 3 channels (Channel 1, 6, 11)

7.2 Test Instruments Configuration:





7.3 Test Equipment List:

Describe	Manufacturer	Model	Serial Number	Calibration	
				Cal. Date	Due Date
Spectrum Analyzer	Agilent	E4445A	MY46181986	May. 07, 2008	May. 07, 2009

7.4 Test Result:

Refer to attached data sheets. Data shows out of band emissions are suppressed well below the -20 dBc minimum required by the Rules.

Note: Test Graphs See next page.

7.5 Test Graphs

7.5.1 802.11b Test Graphs

Applicant : Unitech Electronics Co., Ltd.
Model No : RS700
EUT : Fixed Data Collection Terminal
Test Mode : 802.11b Low CH & High CH
Test Date : 12/23/2008

Please refer to next pager of detail testing data.



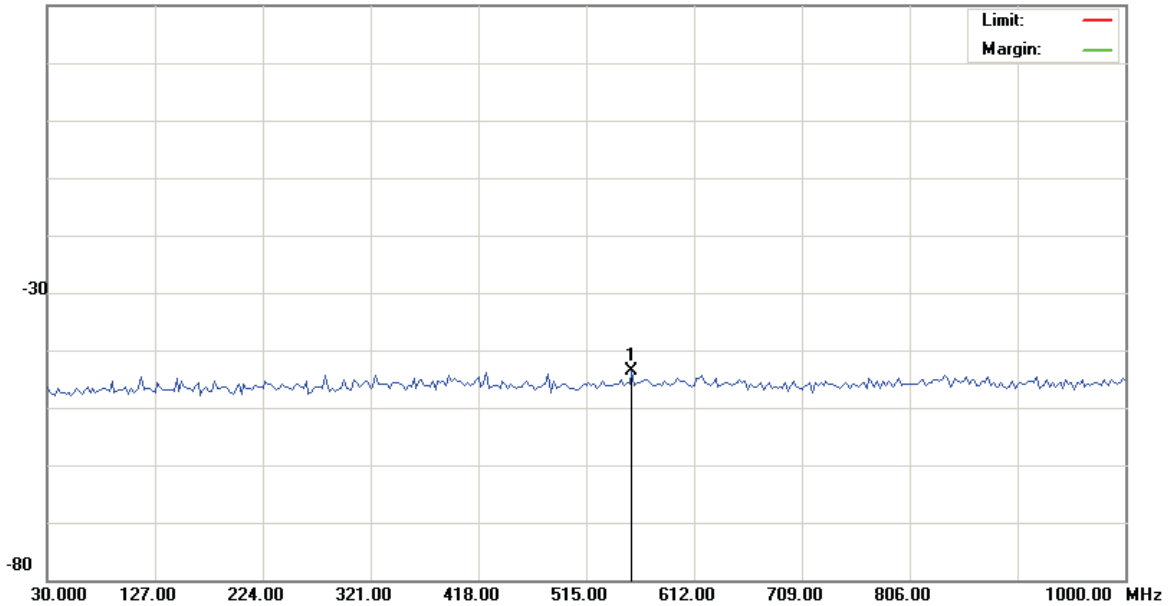
File :RS700(11b)

Data :#1

Date: 2008/12/23

Time: 上午 02:34:43

20.0 dBm



Site

Polarization: Vertical

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: CH01(2412MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	556.2250	-43.69	0.00	-43.69		peak			

*:Maximum data x:Over limit !:over margin

●Reference Only



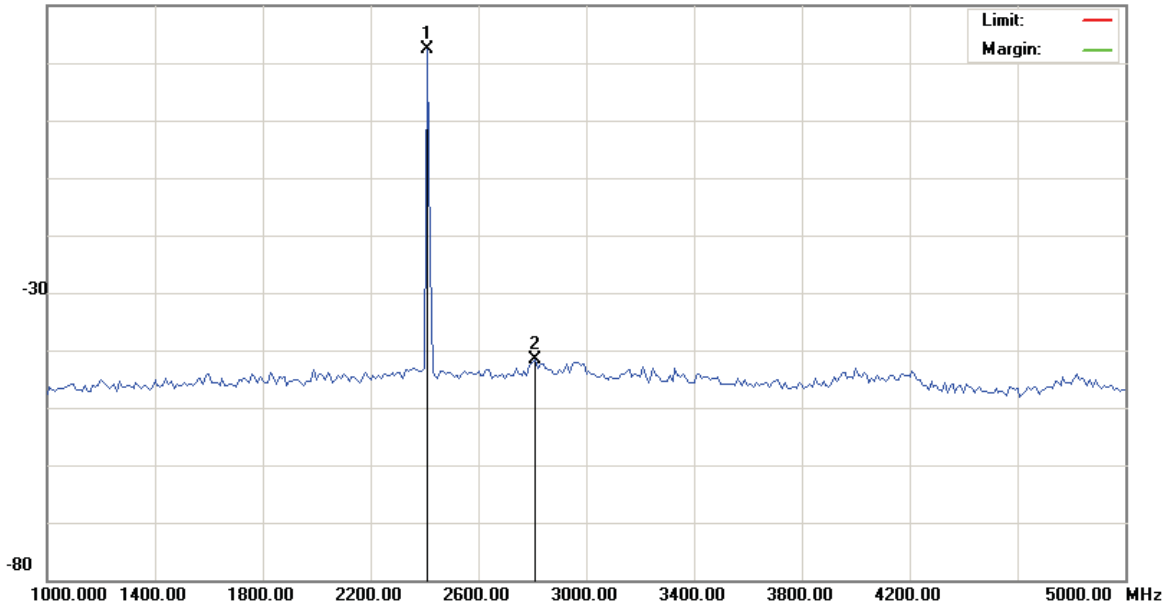
File :RS700(11b)

Data :#2

Date: 2008/12/23

Time: 上午 02:34:55

20.0 dBm



Site

Polarization: *Vertical*

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: CH01(2412MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	2410.000	12.30	0.00	12.30					peak
2		2810.000	-41.67	0.00	-41.67					peak

*:Maximum data x:Over limit !:over margin

●Reference Only



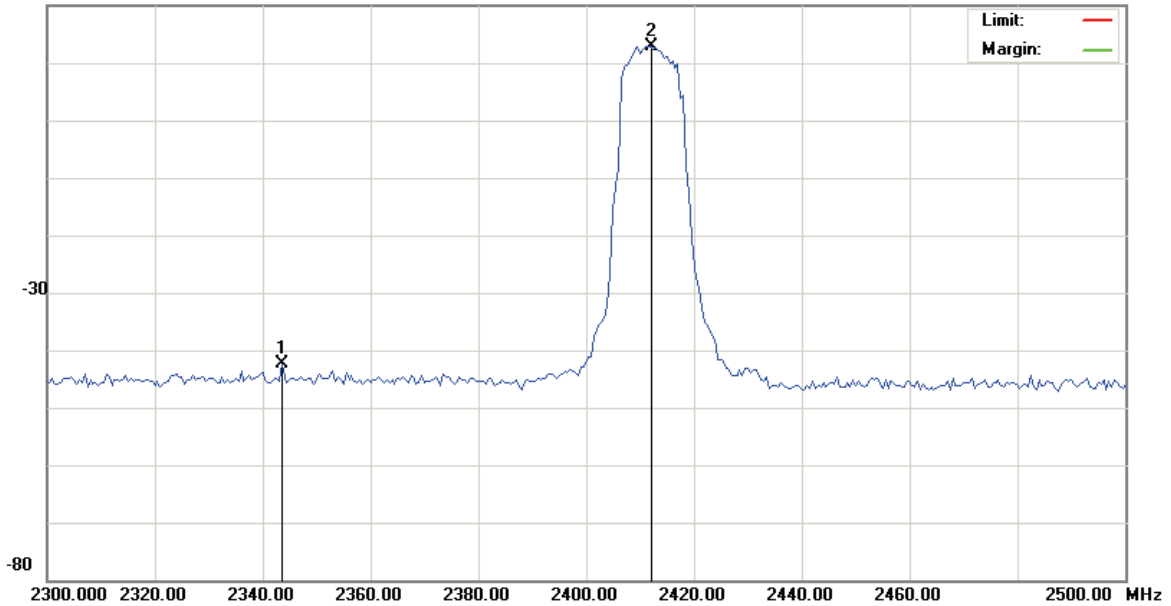
File :RS700(11b)

Data :#3

Date: 2008/12/23

Time: 上午 02:35:08

20.0 dBm



Site

Polarization: *Vertical*

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: CH01(2412MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1		2343.500	-42.49	0.00	-42.49					peak
2	*	2412.000	12.96	0.00	12.96					peak

*:Maximum data x:Over limit !:over margin

●Reference Only



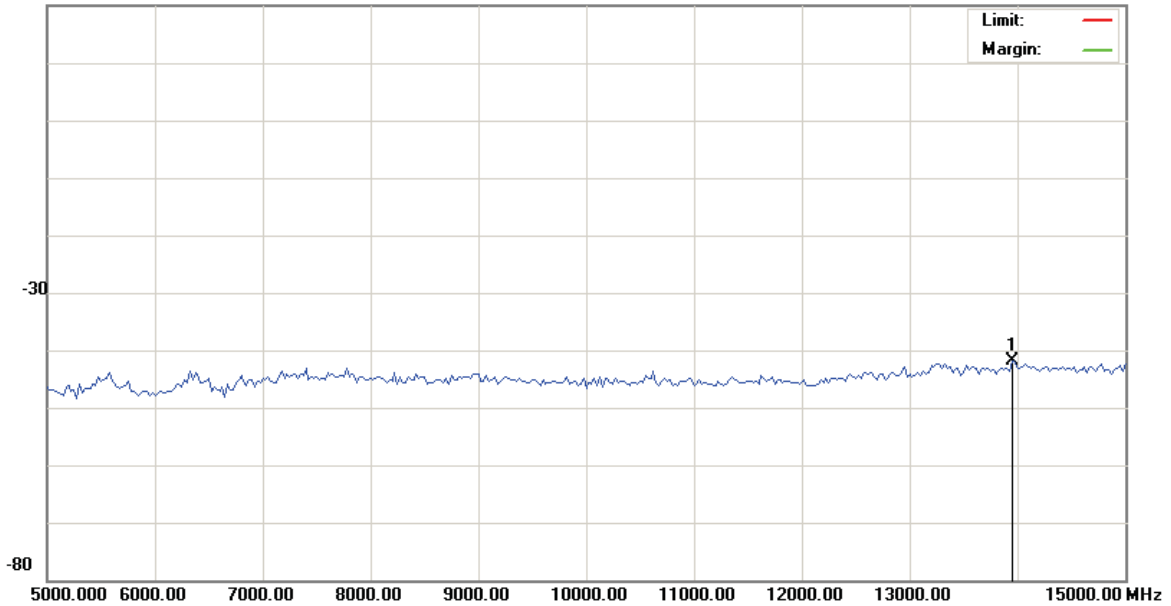
File :RS700(11b)

Data :#4

Date: 2008/12/23

Time: 上午 02:35:21

20.0 dBm



Site

Polarization: *Vertical*

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: CH01(2412MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	13950.00	-41.89	0.00	-41.89		peak			

*:Maximum data x:Over limit !:over margin

●Reference Only



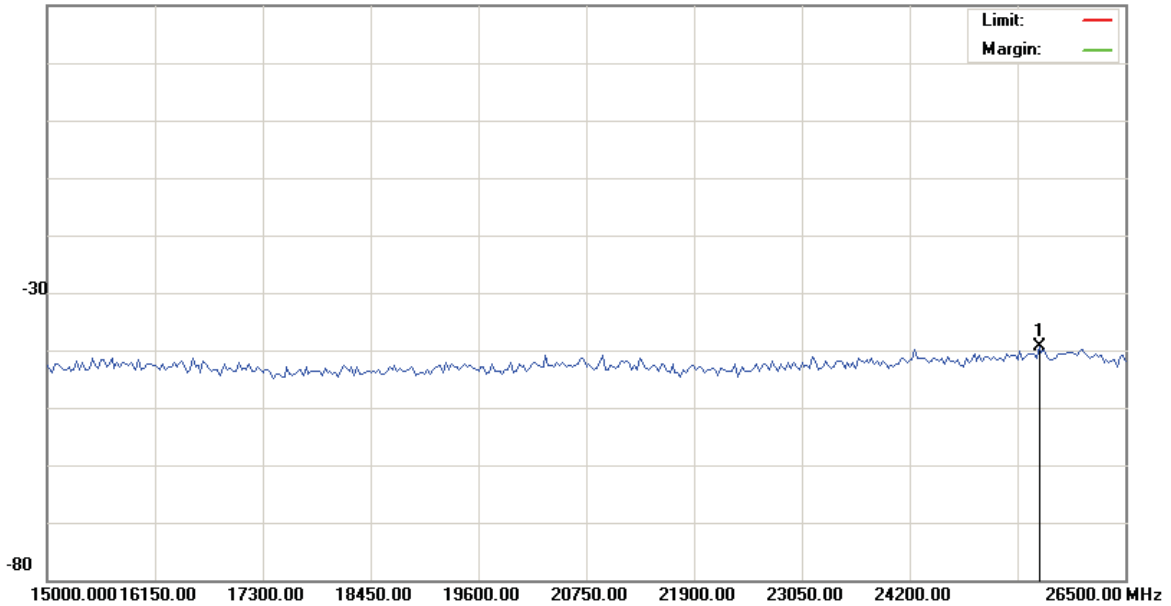
File :RS700(11b)

Data :#5

Date:2008/12/23

Time: 上午 02:35:34

20.0 dBm



Site

Polarization: *Vertical*

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: CH01(2412MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	25580.00	-39.49	0.00	-39.49		peak			

*:Maximum data x:Over limit !:over margin

●Reference Only



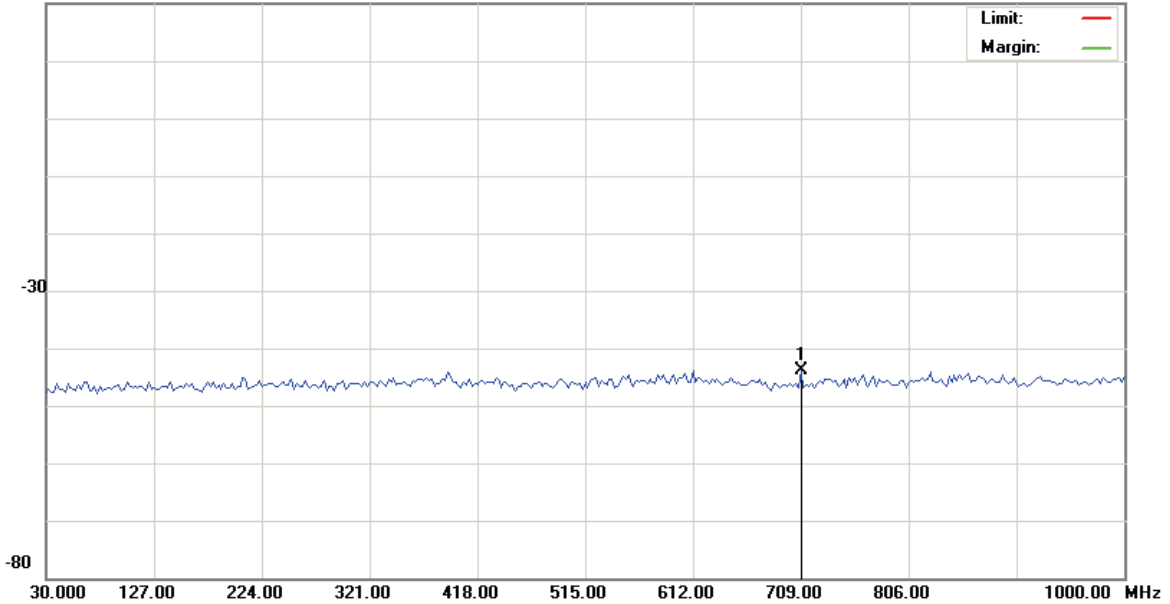
File :RS700(11b)

Data :#6

Date: 2008/12/23

Time: 上午 02:39:05

20.0 dBm



Site

Polarization: **Vertical**

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: CH06(2437MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	709.0000	-43.76	0.00	-43.76		peak			

*:Maximum data x:Over limit !:over margin

●Reference Only



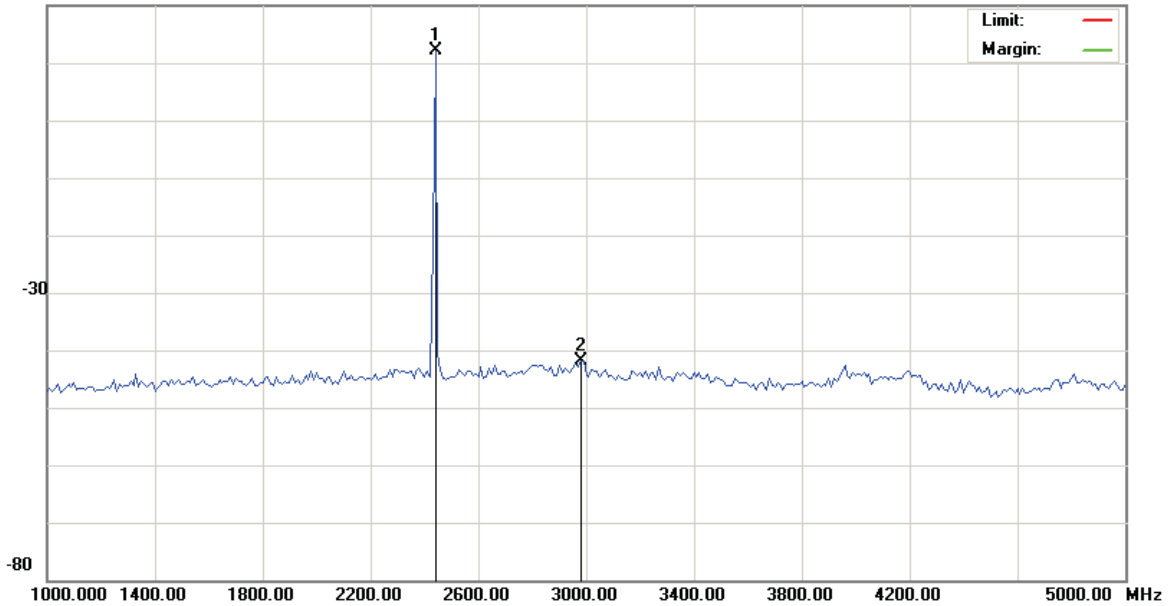
File :RS700(11b)

Data :#7

Date: 2008/12/23

Time: 上午 02:39:18

20.0 dBm



Site

Polarization: *Vertical*

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: CH06(2437MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	2440.000	12.15	0.00	12.15					peak
2		2980.000	-41.80	0.00	-41.80					peak

*:Maximum data x:Over limit !:over margin

●Reference Only



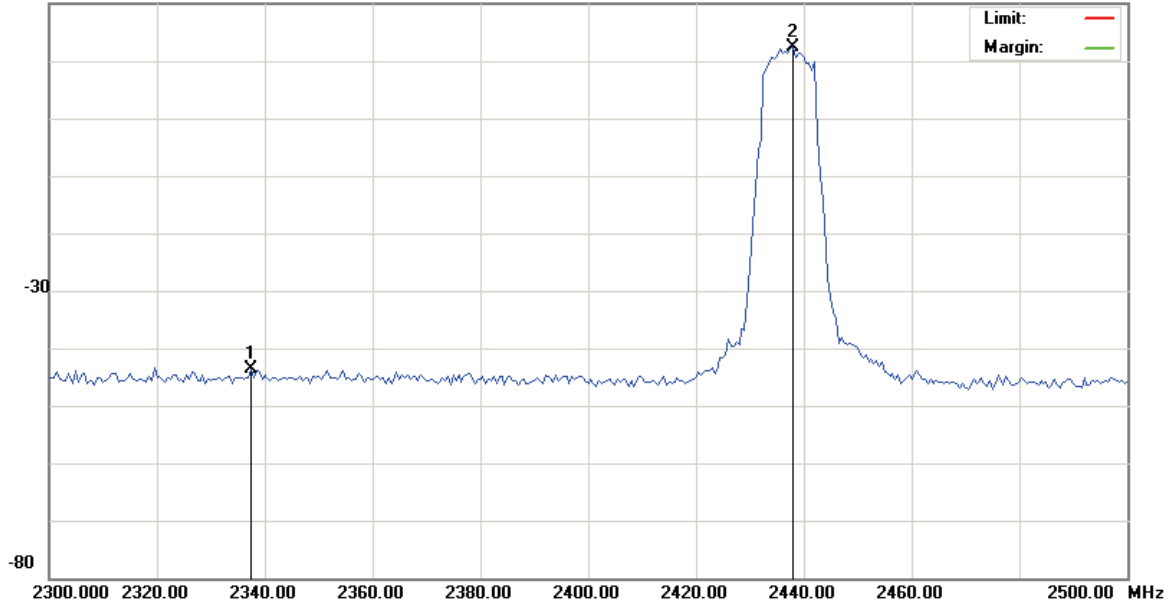
File :RS700(11b)

Data :#8

Date:2008/12/23

Time: 上午 02:39:31

20.0 dBm



Site

Polarization: **Vertical**

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: CH06(2437MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1		2337.500	-43.63	0.00	-43.63					peak
2	*	2438.000	12.46	0.00	12.46					peak

*:Maximum data x:Over limit !:over margin

●Reference Only



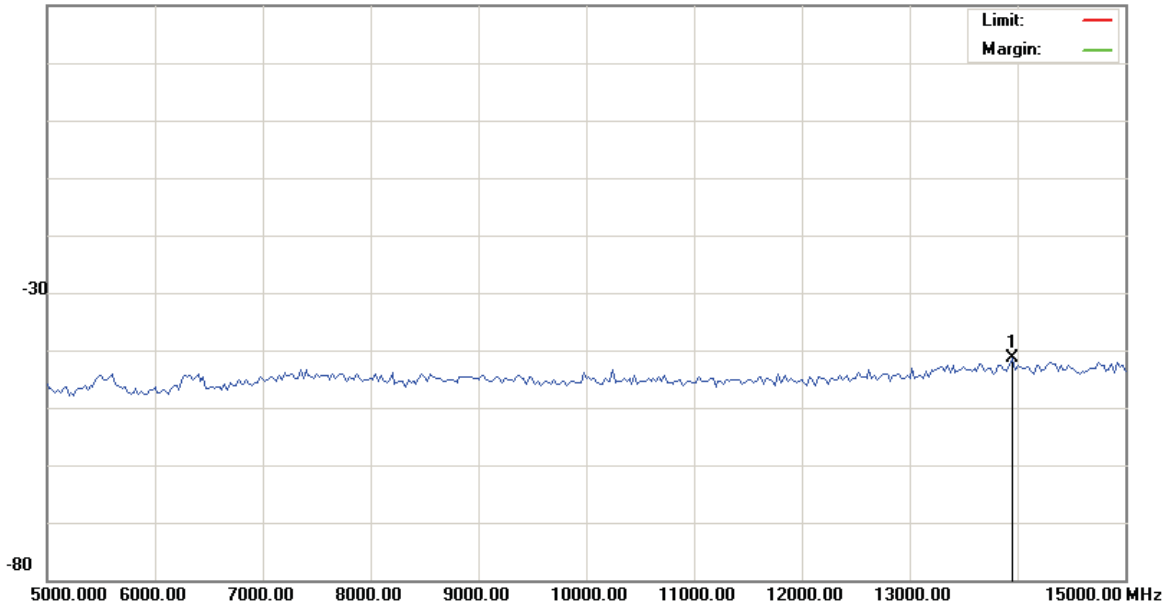
File :RS700(11b)

Data :#9

Date: 2008/12/23

Time: 上午 02:39:44

20.0 dBm



Site

Polarization: *Vertical*

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: CH06(2437MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	13950.00	-41.26	0.00	-41.26		peak			

*:Maximum data x:Over limit !:over margin

●Reference Only



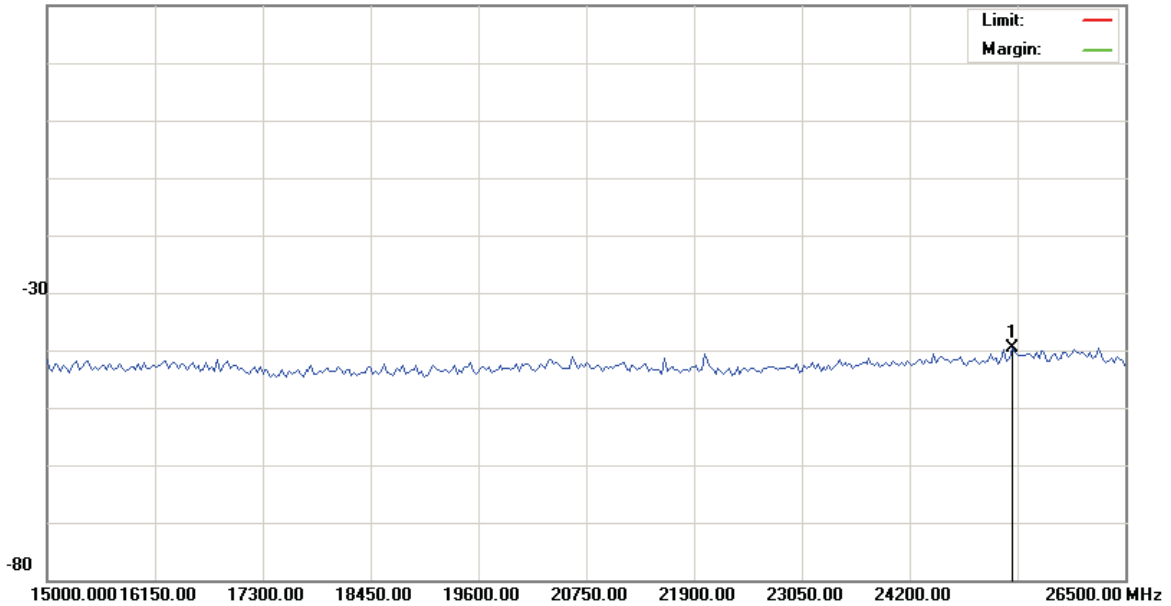
File :RS700(11b)

Data :#10

Date:2008/12/23

Time: 上午 02:39:56

20.0 dBm



Site Polarization: **Vertical** Temperature: 22 °C
 Limit: Power: AC 110V/60Hz Humidity: 60 %
 EUT: Distance: 1m
 M/N: 08-0128-E
 Mode: WIFI(11b)
 Note: CH06(2437MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	25292.50	-39.72	0.00	-39.72		peak			

*:Maximum data x:Over limit !:over margin

●Reference Only



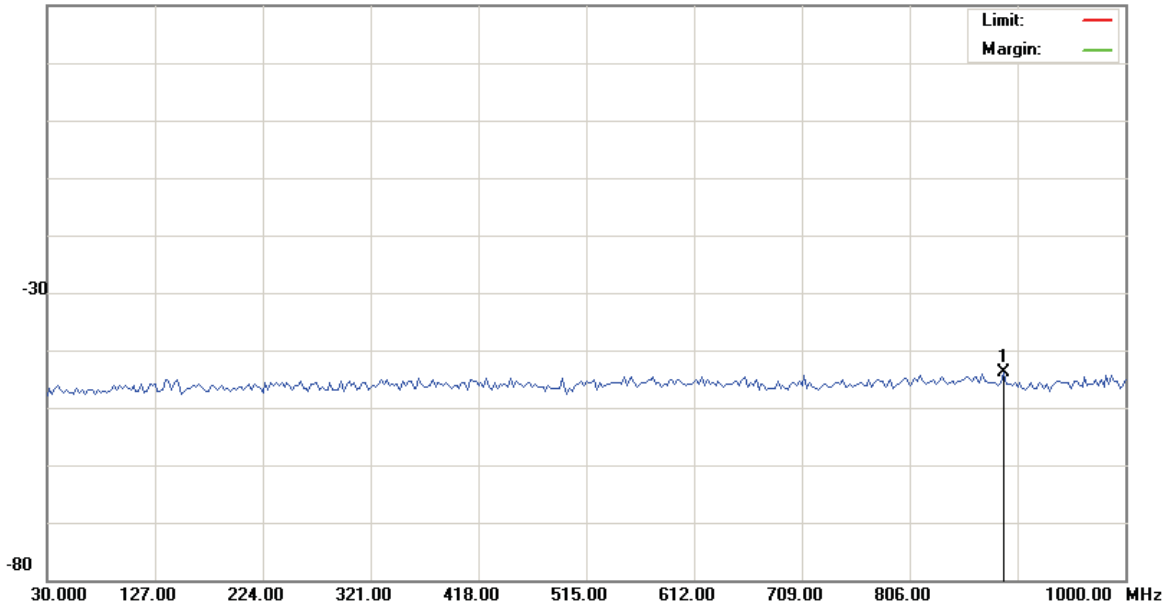
File :RS700(11b)

Data :#11

Date:2008/12/23

Time: 上午 02:43:43

20.0 dBm



Site

Polarization: *Vertical*

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: CH11(2462MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	890.8750	-43.94	0.00	-43.94		peak			

*:Maximum data x:Over limit !:over margin

●Reference Only



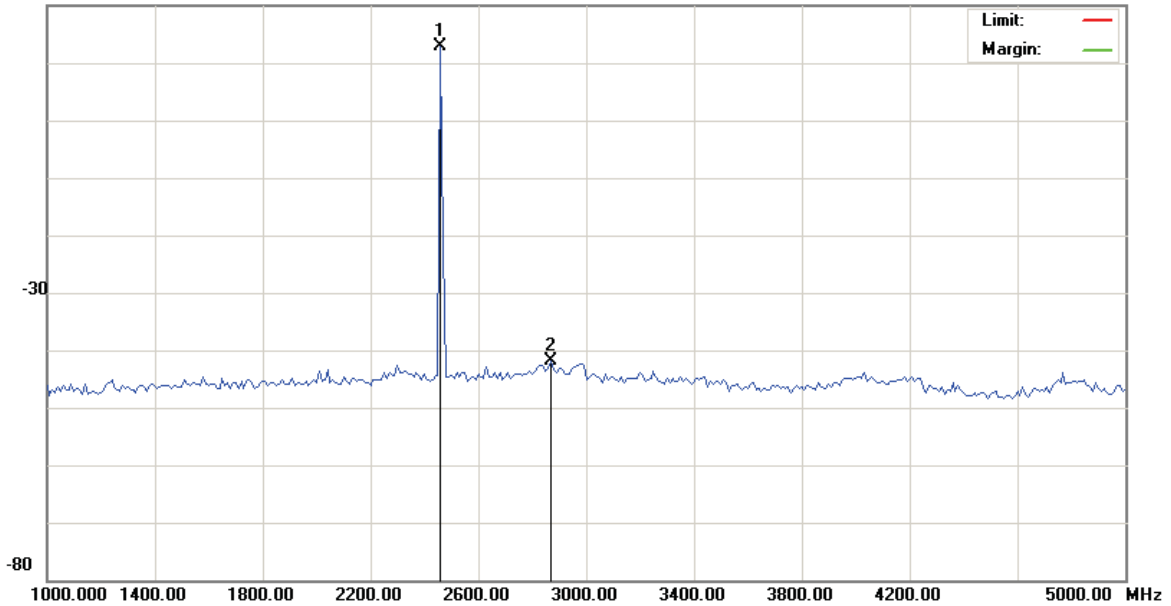
File :RS700(11b)

Data :#12

Date: 2008/12/23

Time: 上午 02:43:56

20.0 dBm



Site

Polarization: *Vertical*

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: CH11(2462MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	2460.000	12.84	0.00	12.84					peak
2		2870.000	-41.78	0.00	-41.78					peak

*:Maximum data x:Over limit !:over margin

●Reference Only



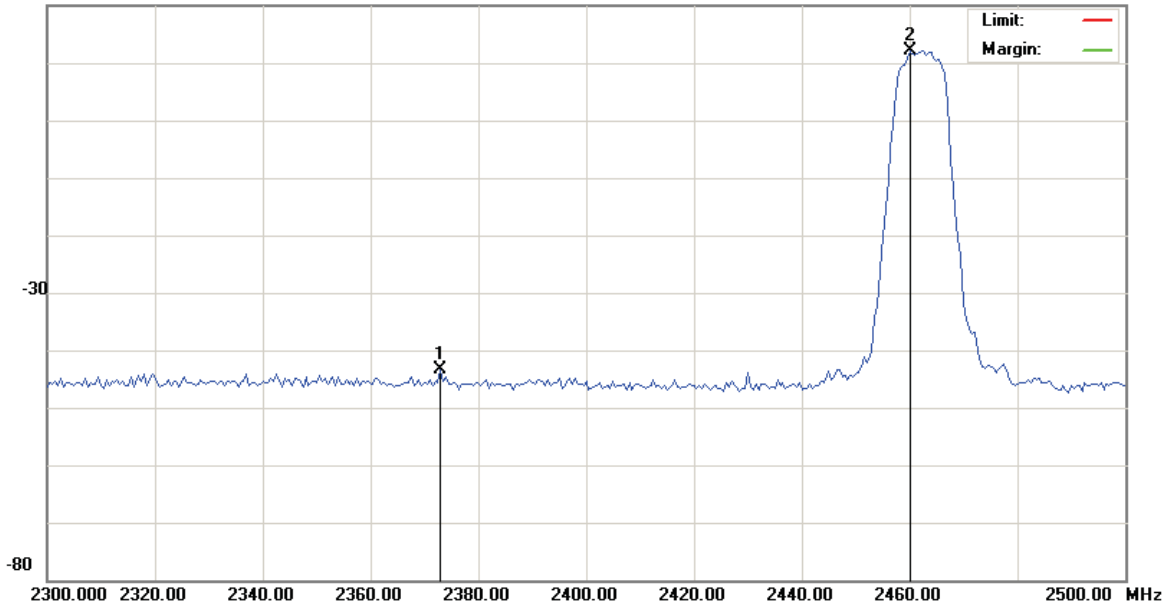
File :RS700(11b)

Data :#13

Date: 2008/12/23

Time: 上午 02:44:09

20.0 dBm



Site

Polarization: **Vertical**

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: CH11(2462MHz)

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1		2373.000	-43.40	0.00	-43.40					peak
2	*	2460.000	12.14	0.00	12.14					peak

*:Maximum data x:Over limit !:over margin

●Reference Only



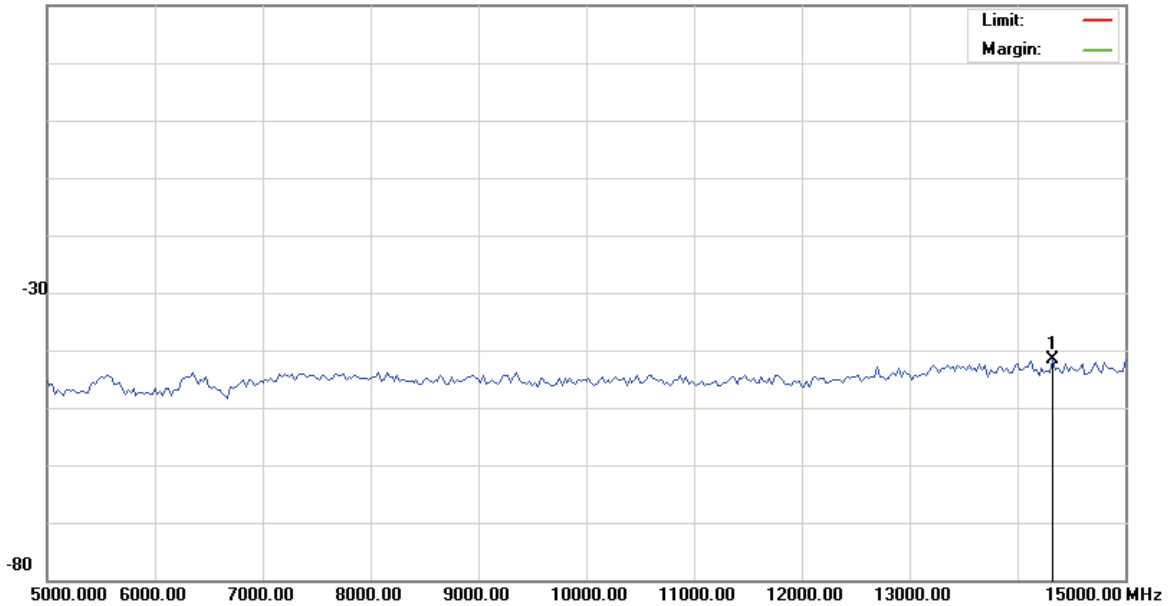
File :RS700(11b)

Data :#14

Date: 2008/12/23

Time: 上午 02:44:22

20.0 dBm



Site Polarization: **Vertical** Temperature: 22 °C
Limit: Power: AC 110V/60Hz Humidity: 60 %
EUT: Distance: 1m
M/N: 08-0128-E
Mode: WIFI(11b)
Note: CH11(2462MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	14325.00	-41.51	0.00	-41.51		peak			

*:Maximum data x:Over limit !:over margin

●Reference Only



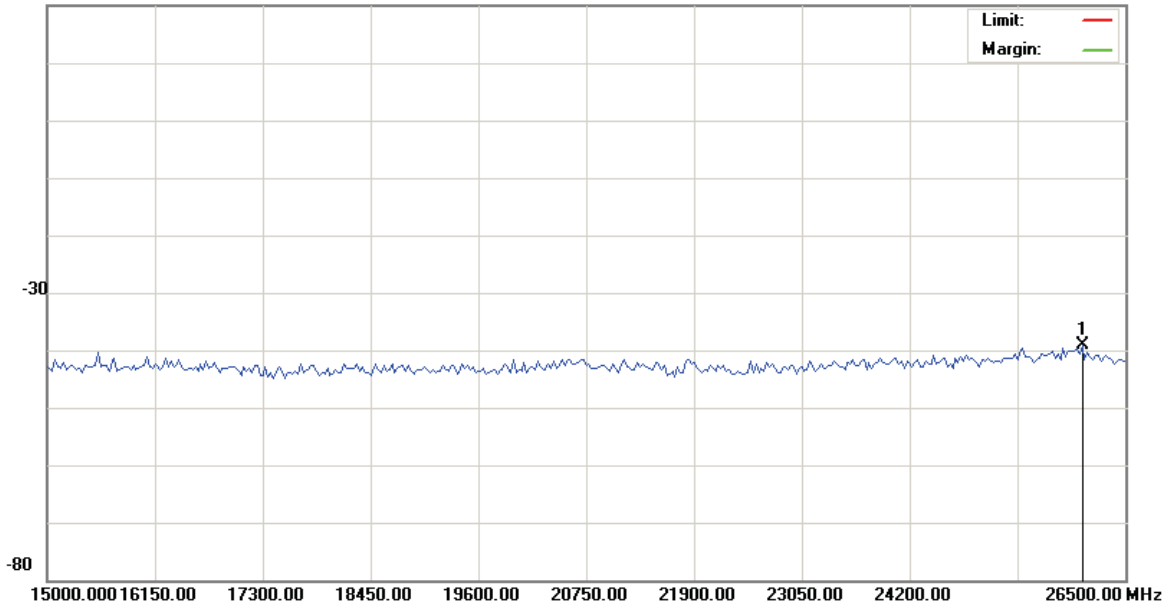
File :RS700(11b)

Data :#15

Date: 2008/12/23

Time: 上午 02:44:35

20.0 dBm



Site Polarization: **Vertical** Temperature: 22 °C
 Limit: Power: AC 110V/60Hz Humidity: 60 %
 EUT: Distance: 1m
 M/N: 08-0128-E
 Mode: WIFI(11b)
 Note: CH11(2462MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	26040.00	-39.22	0.00	-39.22		peak			

*:Maximum data x:Over limit !:over margin

●Reference Only



7.5.2 802.11g Test Graphs

Applicant : Unitech Electronics Co., Ltd.
Model No : RS700
EUT : Fixed Data Collection Terminal
Test Mode : 802.11g Low CH & High CH
Test Date : 12/23/2008

Please refer to next pager of detail testing data.



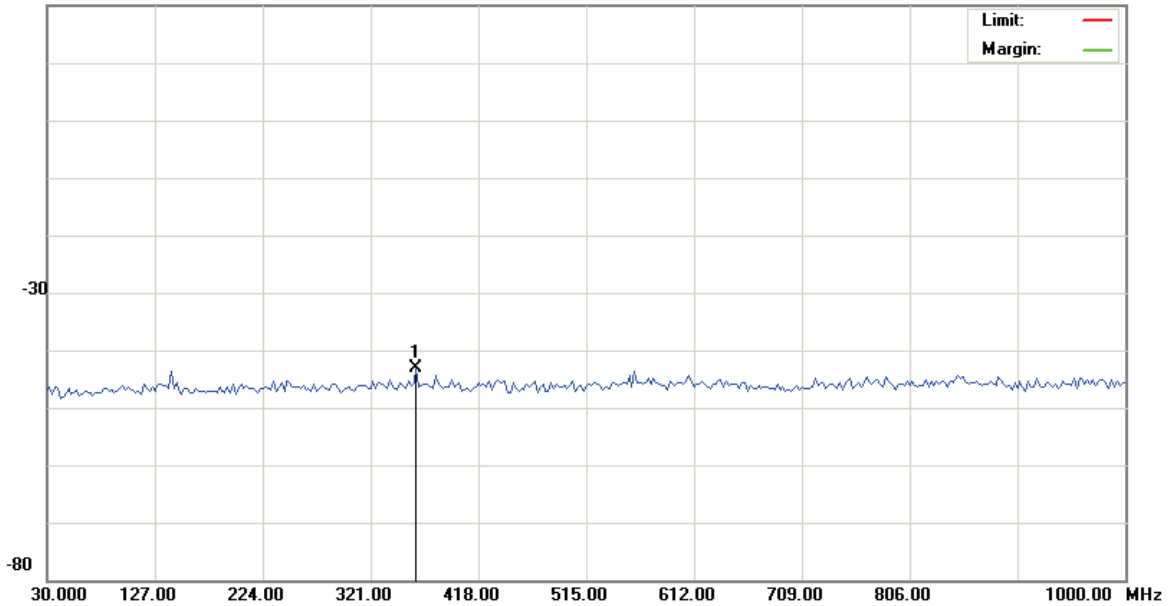
File :RS700(11g)

Data :#1

Date: 2008/12/23

Time: 上午 02:10:16

20.0 dBm



Site

Polarization: *Vertical*

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH01(2412MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	362.2250	-43.19	0.00	-43.19					peak

*:Maximum data x:Over limit !:over margin

●Reference Only



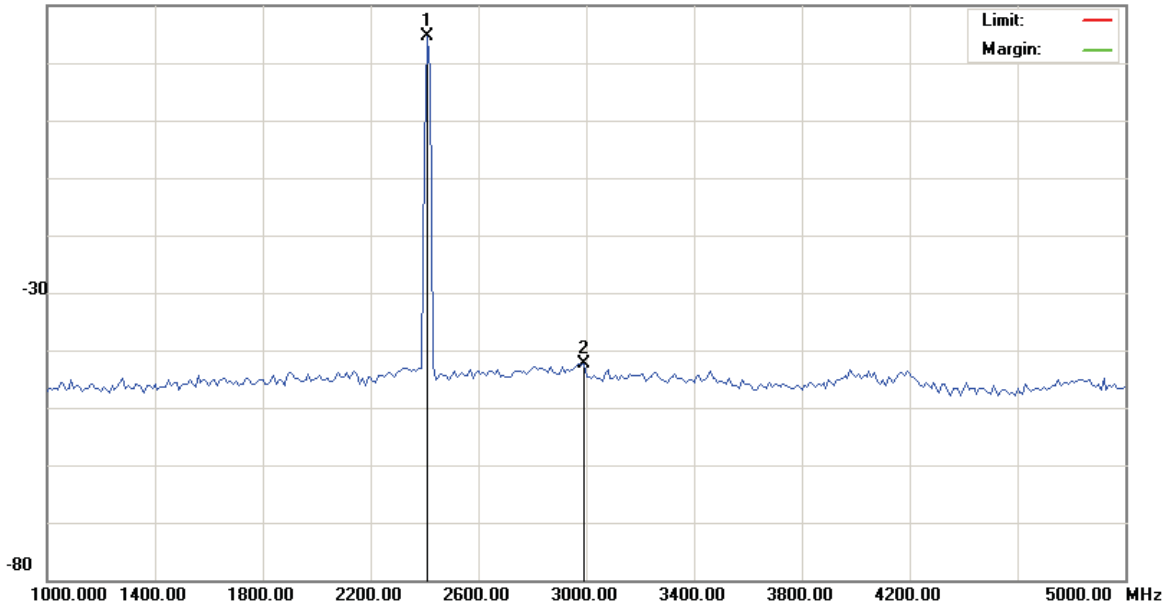
File :RS700(11g)

Data :#2

Date: 2008/12/23

Time: 上午 02:10:29

20.0 dBm



Site

Polarization: **Vertical**

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH01(2412MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	2410.000	14.72	0.00	14.72					peak
2		2990.000	-42.31	0.00	-42.31					peak

*:Maximum data x:Over limit !:over margin

●Reference Only



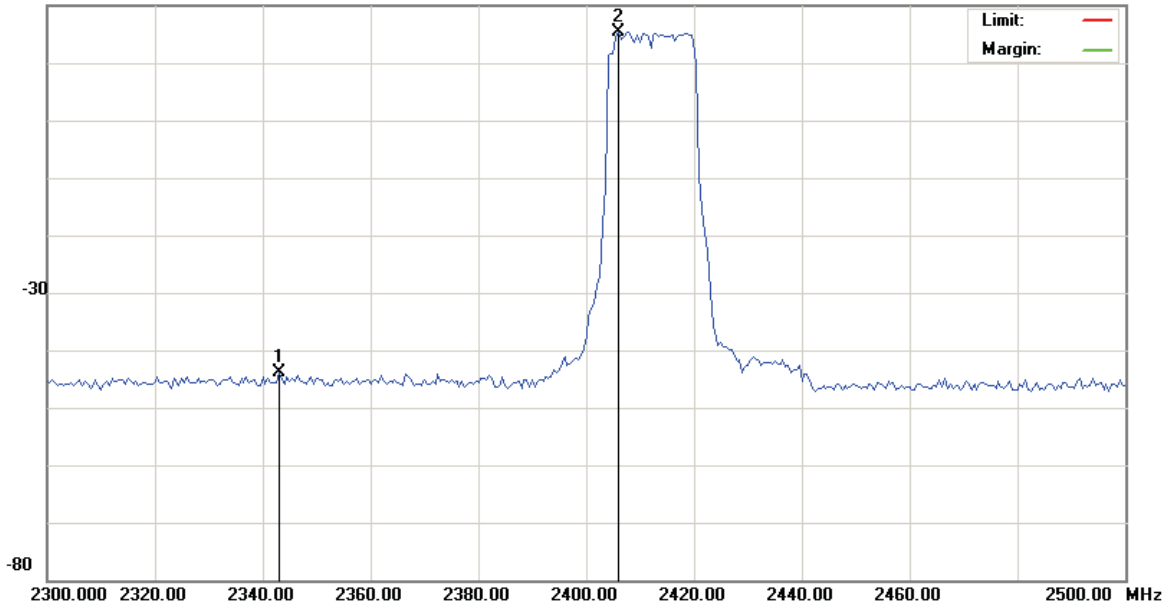
File :RS700(11g)

Data :#3

Date: 2008/12/23

Time: 上午 02:10:42

20.0 dBm



Site

Polarization: **Vertical**

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH01(2412MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1		2343.000	-43.99	0.00	-43.99					peak
2	*	2406.000	15.47	0.00	15.47					peak

*:Maximum data x:Over limit !:over margin

●Reference Only



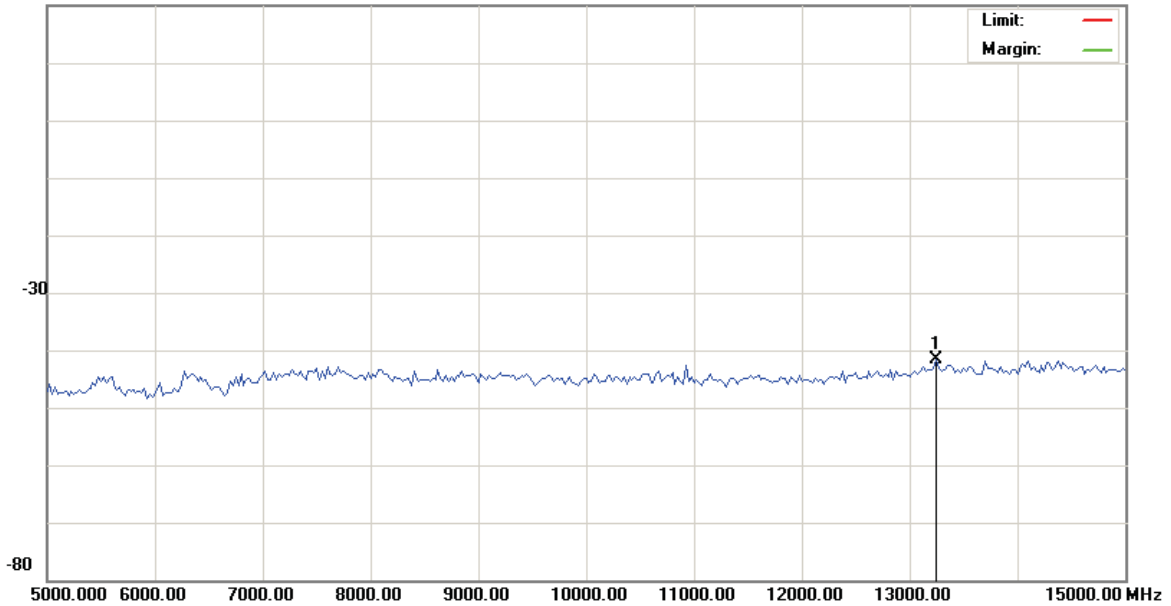
File :RS700(11g)

Data :#4

Date: 2008/12/23

Time: 上午 02:10:54

20.0 dBm



Site

Polarization: *Vertical*

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH01(2412MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	13250.00	-41.74	0.00	-41.74					peak

*:Maximum data x:Over limit !:over margin

●Reference Only



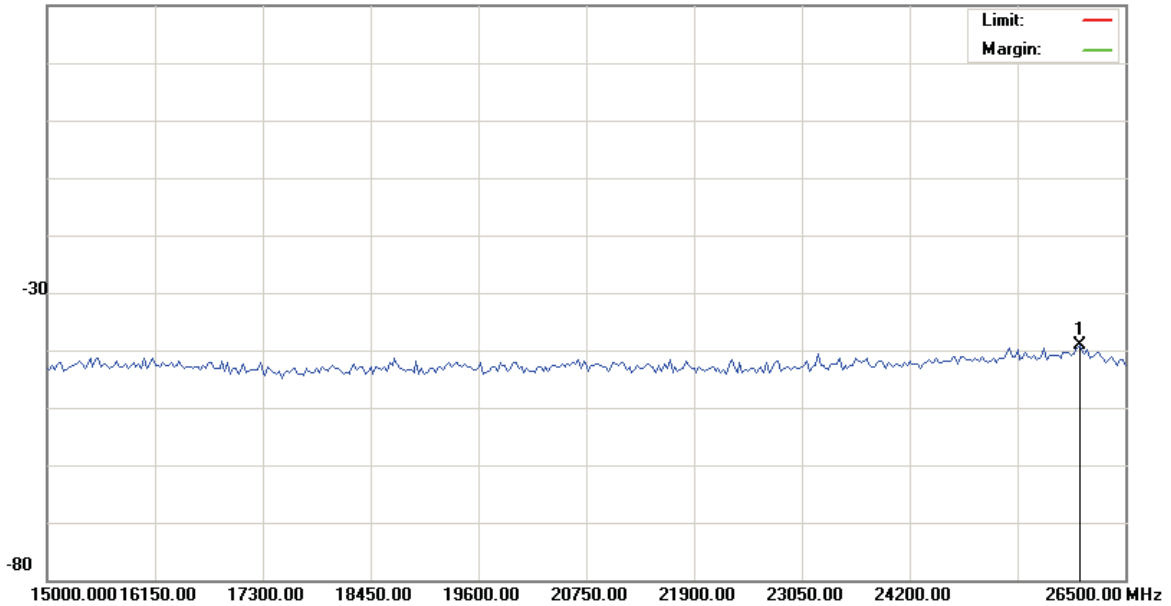
File :RS700(11g)

Data :#5

Date:2008/12/23

Time: 上午 02:11:07

20.0 dBm



Site

Polarization: **Vertical**

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH01(2412MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	26011.25	-39.09	0.00	-39.09		peak			

*:Maximum data x:Over limit !:over margin

●Reference Only



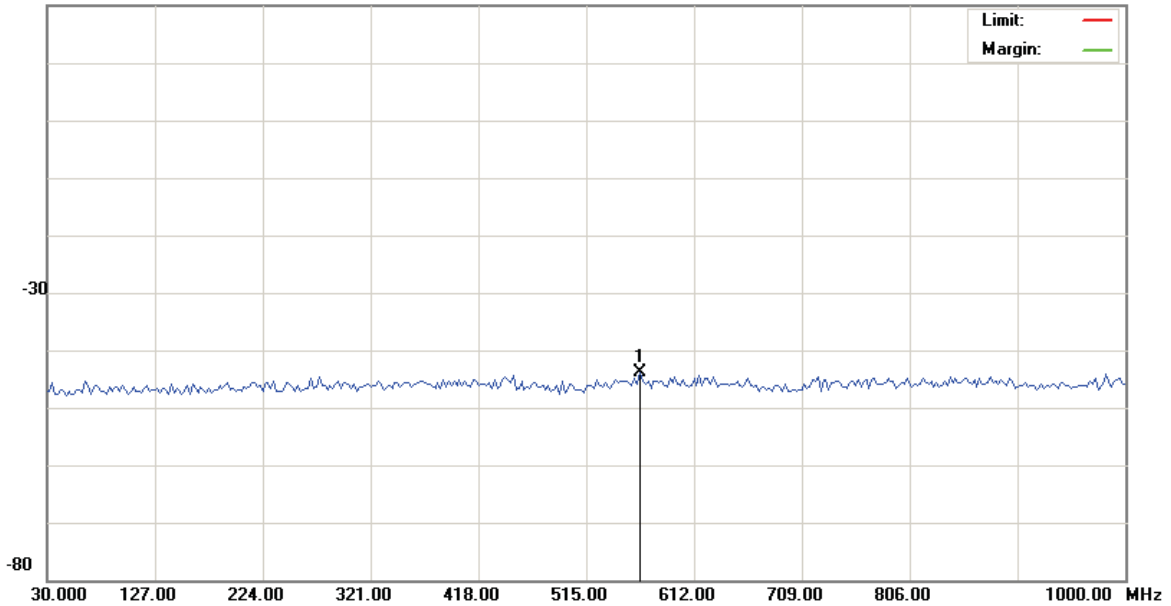
File :RS700(11g)

Data :#6

Date:2008/12/23

Time: 上午 02:15:49

20.0 dBm



Site

Polarization: **Vertical**

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH06(2437MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	563.5000	-43.78	0.00	-43.78		peak			

*:Maximum data x:Over limit !:over margin

●Reference Only



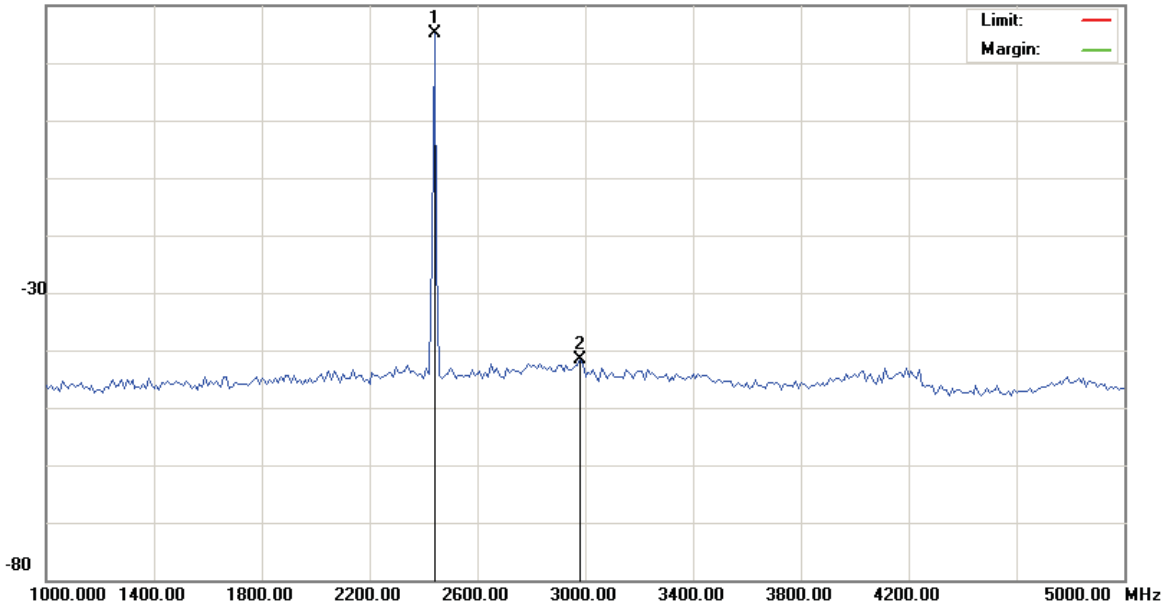
File :RS700(11g)

Data :#7

Date: 2008/12/23

Time: 上午 02:16:02

20.0 dBm



Site

Polarization: **Vertical**

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH06(2437MHz)

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	2440.000	15.18	0.00	15.18					peak
2		2980.000	-41.65	0.00	-41.65					peak

*:Maximum data x:Over limit !:over margin

●Reference Only



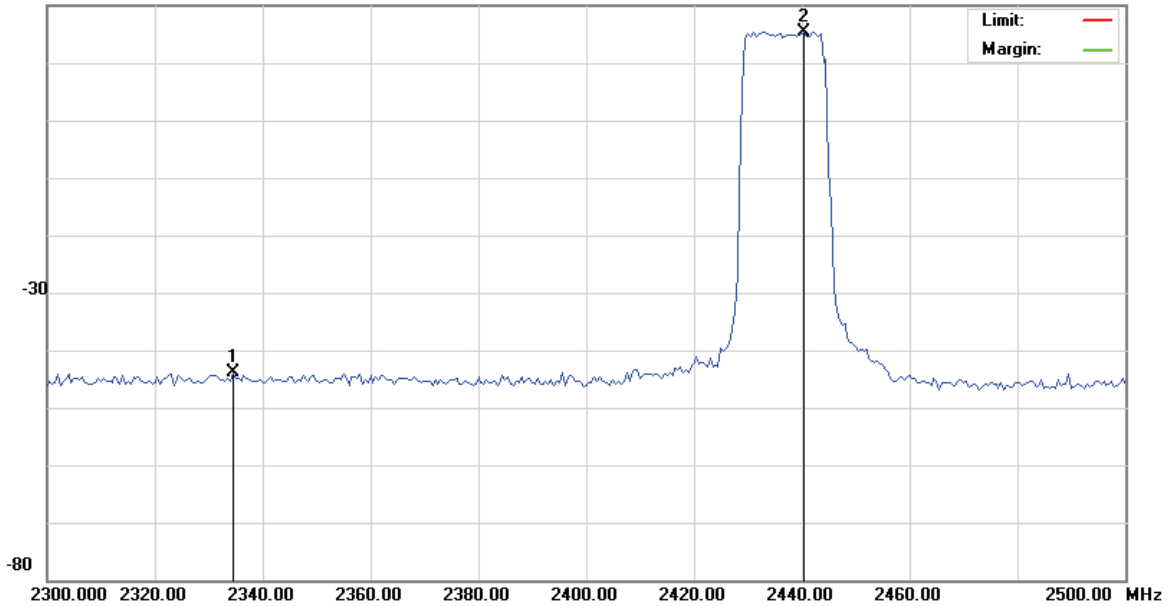
File :RS700(11g)

Data :#8

Date:2008/12/23

Time: 上午 02:16:14

20.0 dBm



Site

Polarization: **Vertical**

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH06(2437MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1		2334.500	-43.93	0.00	-43.93					peak
2	*	2440.500	15.36	0.00	15.36					peak

*:Maximum data x:Over limit !:over margin

●Reference Only



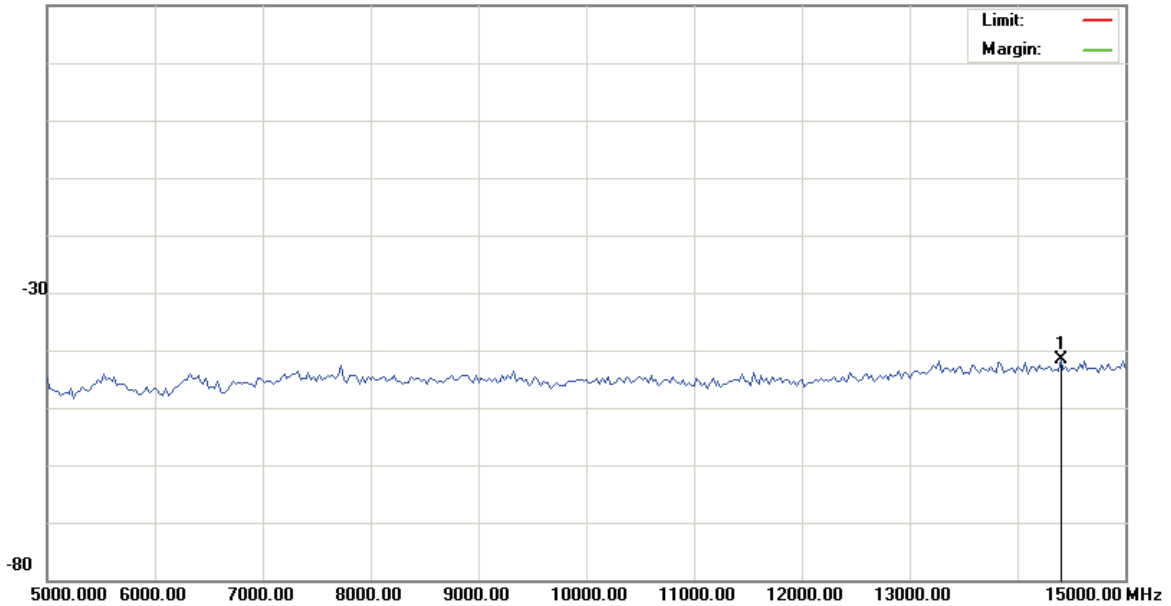
File :RS700(11g)

Data :#9

Date: 2008/12/23

Time: 上午 02:16:27

20.0 dBm



Site

Polarization: *Vertical*

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH06(2437MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	14400.00	-41.58	0.00	-41.58		peak			

*:Maximum data x:Over limit !:over margin

●Reference Only



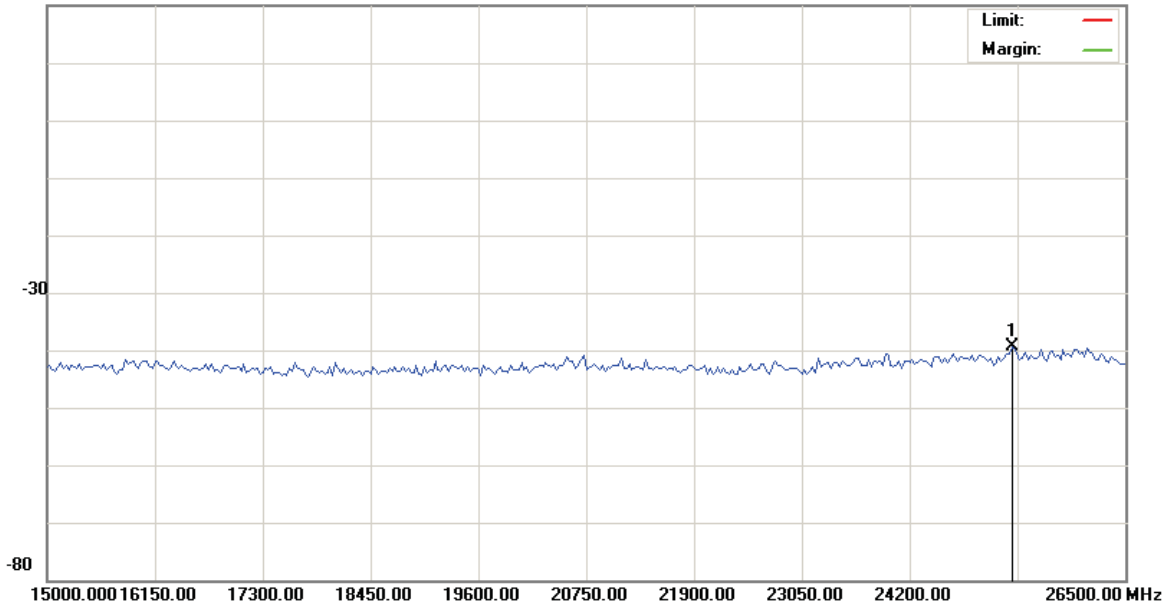
File :RS700(11g)

Data :#10

Date: 2008/12/23

Time: 上午 02:16:40

20.0 dBm



Site

Polarization: **Vertical**

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH06(2437MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	25292.50	-39.46	0.00	-39.46		peak			

*:Maximum data x:Over limit !:over margin

●Reference Only



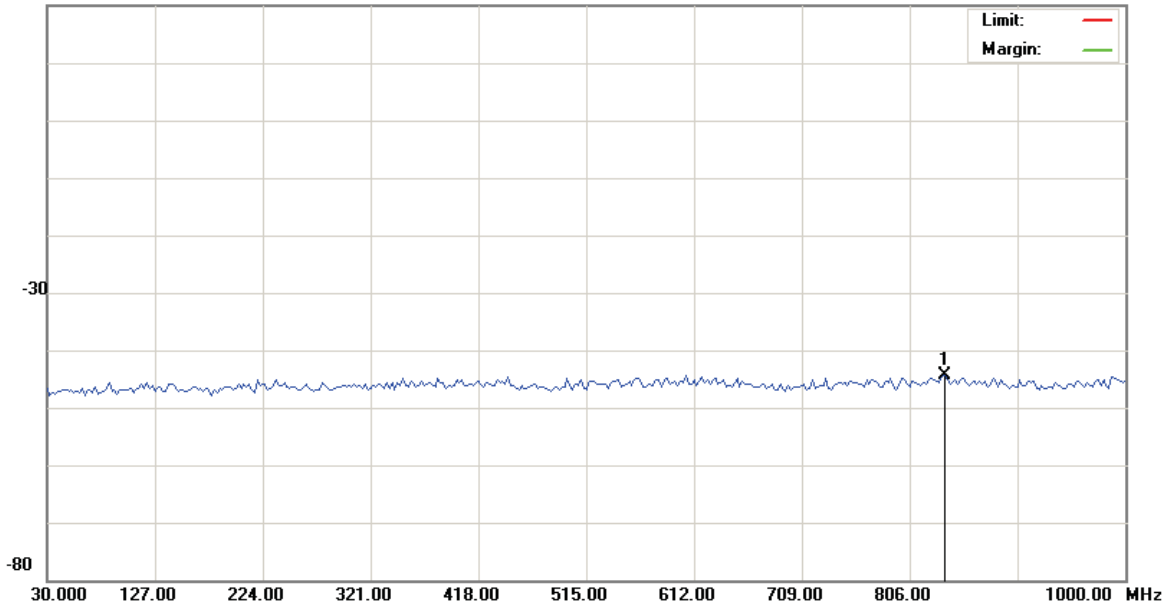
File :RS700(11g)

Data :#11

Date: 2008/12/23

Time: 上午 02:48:55

20.0 dBm



Site

Polarization: *Vertical*

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH11(2462MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	837.5250	-44.26	0.00	-44.26					peak

*:Maximum data x:Over limit !:over margin

●Reference Only



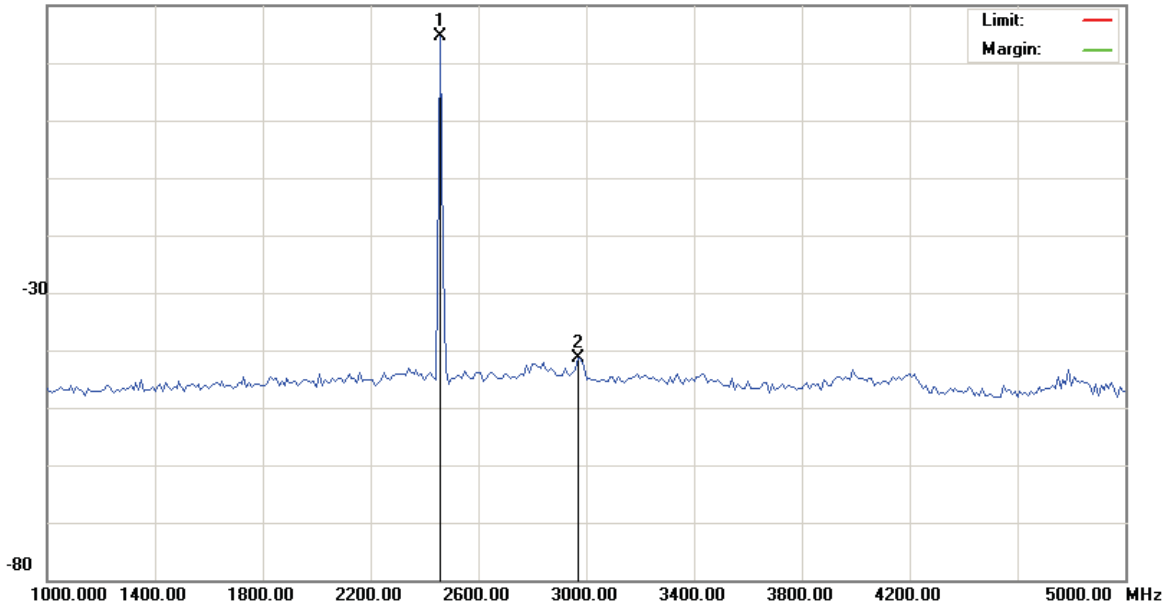
File :RS700(11g)

Data :#12

Date:2008/12/23

Time: 上午 02:49:08

20.0 dBm



Site

Polarization: **Vertical**

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH11(2462MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	2460.000	14.68	0.00	14.68					peak
2		2970.000	-41.36	0.00	-41.36					peak

*:Maximum data x:Over limit !:over margin

●Reference Only



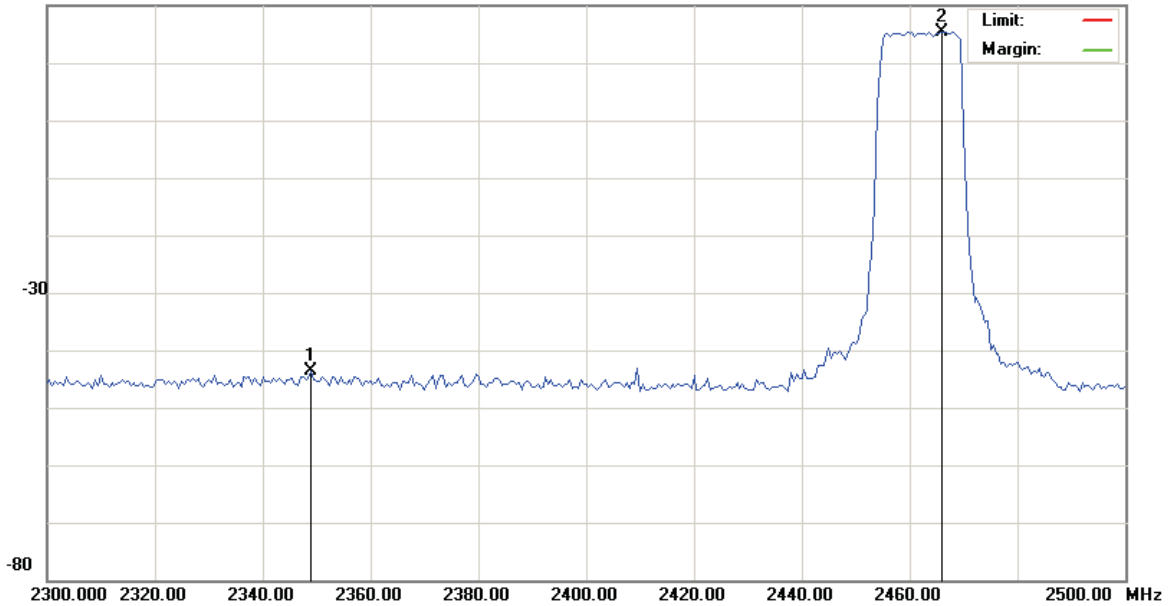
File :RS700(11g)

Data :#13

Date: 2008/12/23

Time: 上午 02:49:21

20.0 dBm



Site

Polarization: *Vertical*

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH11(2462MHz)

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1		2349.000	-43.69	0.00	-43.69					peak
2	*	2466.000	15.45	0.00	15.45					peak

*:Maximum data x:Over limit !:over margin

●Reference Only



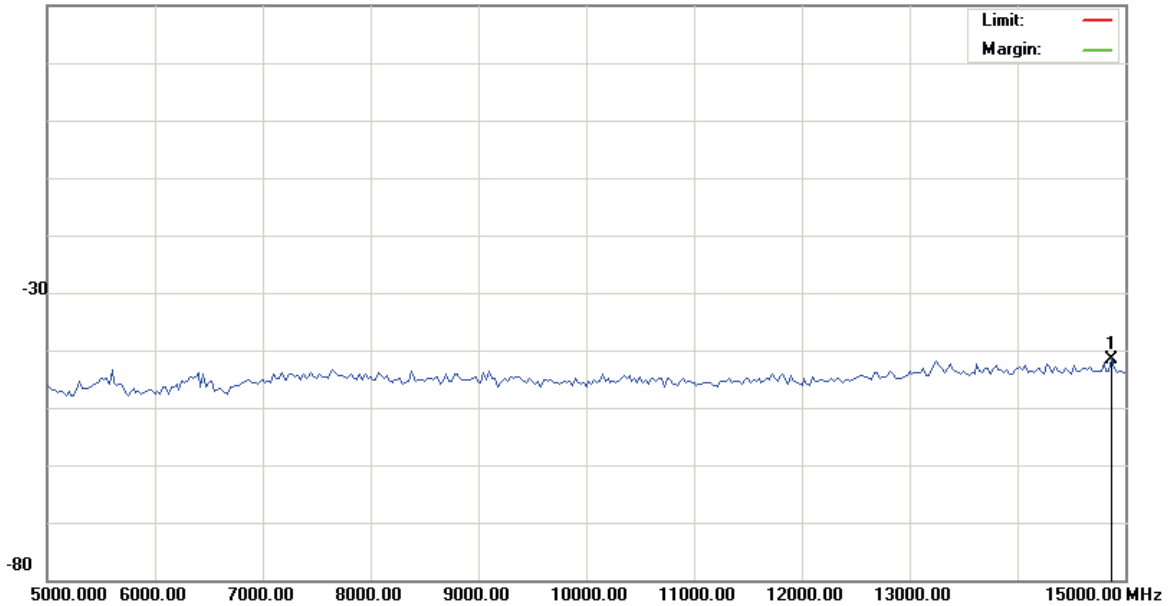
File :RS700(11g)

Data :#14

Date: 2008/12/23

Time: 上午 02:49:34

20.0 dBm



Site

Polarization: **Vertical**

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH11(2462MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	14875.00	-41.50	0.00	-41.50		peak			

*:Maximum data x:Over limit !:over margin

●Reference Only



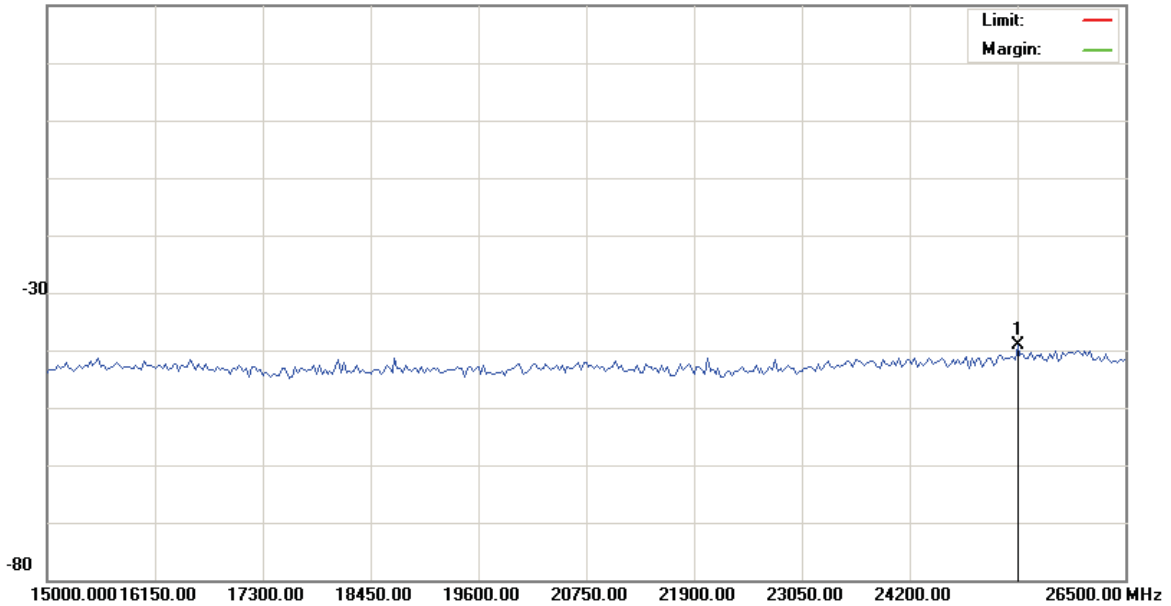
File :RS700(11g)

Data :#15

Date: 2008/12/23

Time: 上午 02:49:47

20.0 dBm



Site

Polarization: **Vertical**

Temperature: 22 °C

Limit:

Power: AC 110V/60Hz

Humidity: 60 %

EUT:

Distance: 1m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH11(2462MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	25350.00	-39.15	0.00	-39.15		peak			

*:Maximum data x:Over limit !:over margin

●Reference Only

8. Band Edges Requirements

8.1 Test Condition & Setup:

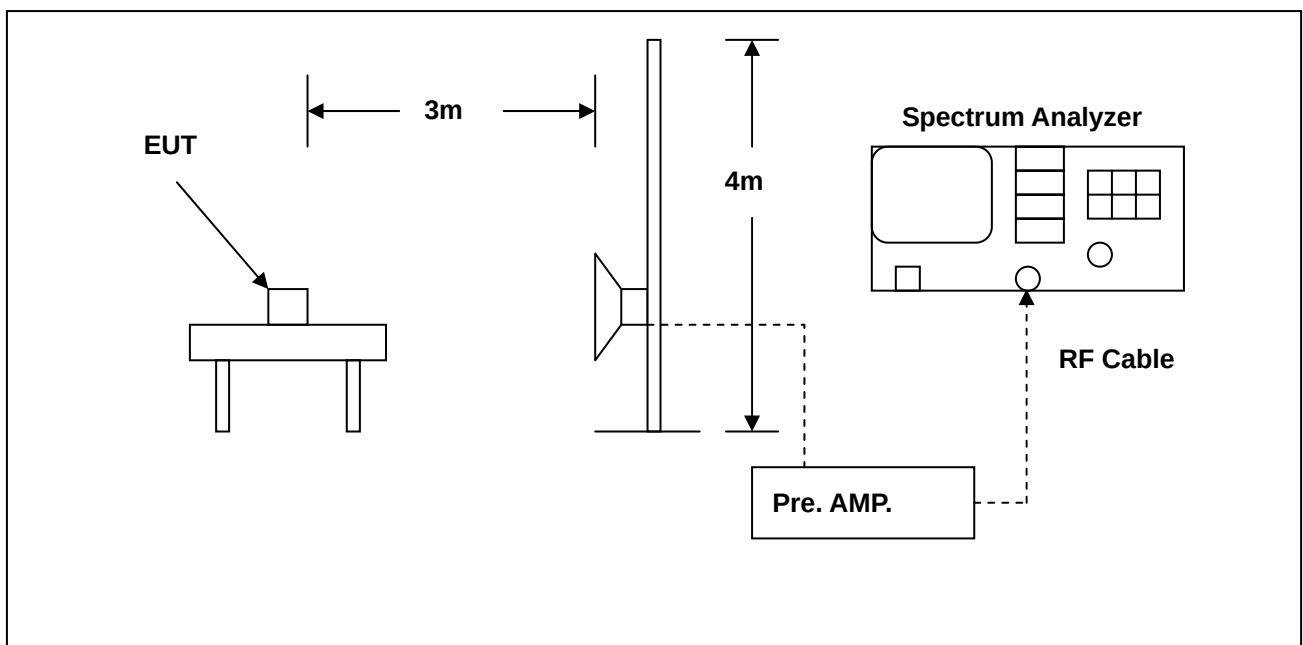
The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The emissions on the harmonics frequencies, the limits, and the margin of compliance are presented. These tests were made when the transmitter was in full radiated power. The additional test was performed to show compliance with the requirement at the band-edge frequency 2483.5 MHz and up to 2500 MHz and at 2390.0 MHz.

The transmitter was configured with the worst case antenna and setup to transmit at the highest channel. Then the field strength was measured at 2483.5 MHz.

The transmitter was then configured with the worst case antenna and setup to transmit at the lowest channel. Then the field strength was measured at 2390.0 MHz. These tests were performed at 4 different bit rates.

8.2 Test Instruments Configuration:





8.3 Test Equipment List:

Describe	Manufacturer	Model	Serial Number	Calibration	
				Cal. Date	Due Date
Spectrum Analyzer	Agilent	E4408B	MY45107753	Jun. 05, 2008	Jun. 05, 2009
Pre Amplifier	Agilent	8449B	3008A02237	Jun. 03, 2008	Jun. 03, 2009
Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	Jun. 26, 2008	Jun. 26, 2009

8.4 Test Result:

8.4.1 Test Result:

Applicant : Unitech Electronics Co., Ltd.
Model No : RS700
EUT : Fixed Data Collection Terminal
Test Mode : 802.11b Low CH & High CH
Test Date : 12/16/2008

Please refer to next pager of detail testing data.

Notes:

1. Margin= Amplitude - Limits
2. Height of table for EUT placed: 0.8 Meter.
3. ANT= Antenna height.
4. Duty= Duty cycle correction factor.
5. Dis= Distance extrapolation factor.
6. Amplitude= Reading Amplitude - Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
7. Actual Amp= Amplitude - Duty - Dis.



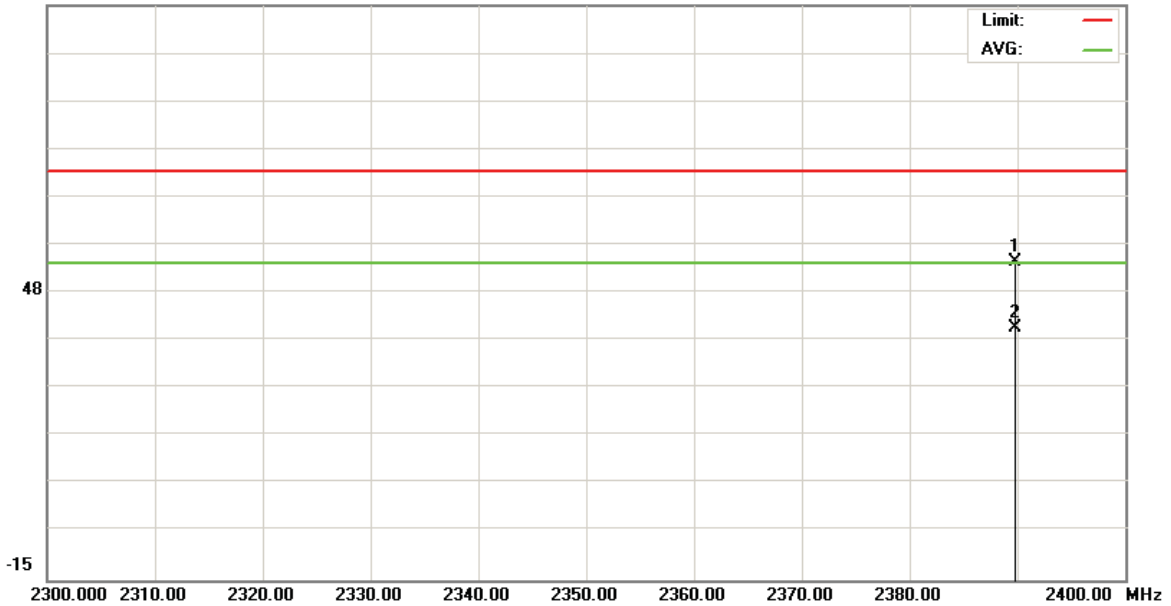
File :RS700(Band Edge)

Data :#1

Date: 2008/12/16

Time: 下午 12:09:09

110.0 dBuV



Site

Polarization: *Vertical*

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 3m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: 2412MHz , Antenna 100cm

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Antenna Height cm	Table Degree degree	Comment
1		2389.800	54.10	0.16	54.26	74.00	-19.74	peak		
2	*	2389.800	39.59	0.16	39.75	54.00	-14.25	AVG		

*:Maximum data x:Over limit !:over margin

●Reference Only



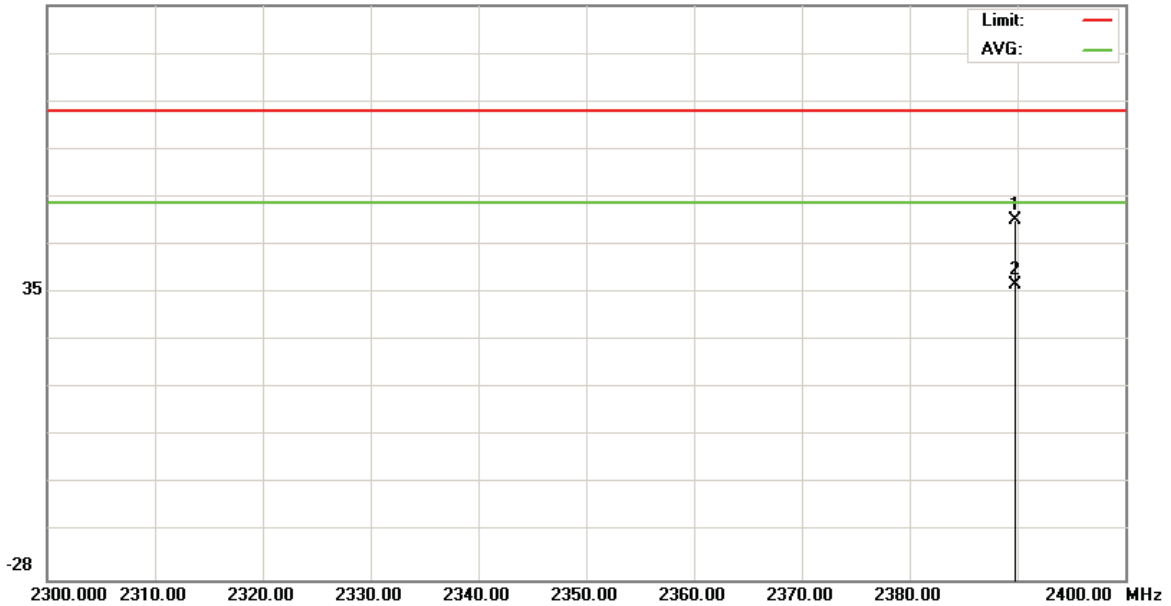
File :RS700(Band Edge)

Data :#5

Date: 2008/12/16

Time: 下午 12:15:23

97.0 dBuV



Site

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 3m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: 2412MHz , Antenna 100cm

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Antenna Height cm	Table Degree degree	Comment
1		2389.800	50.12	0.16	50.28	74.00	-23.72	peak		
2	*	2389.800	35.95	0.16	36.11	54.00	-17.89	AVG		

*:Maximum data x:Over limit !:over margin

●Reference Only



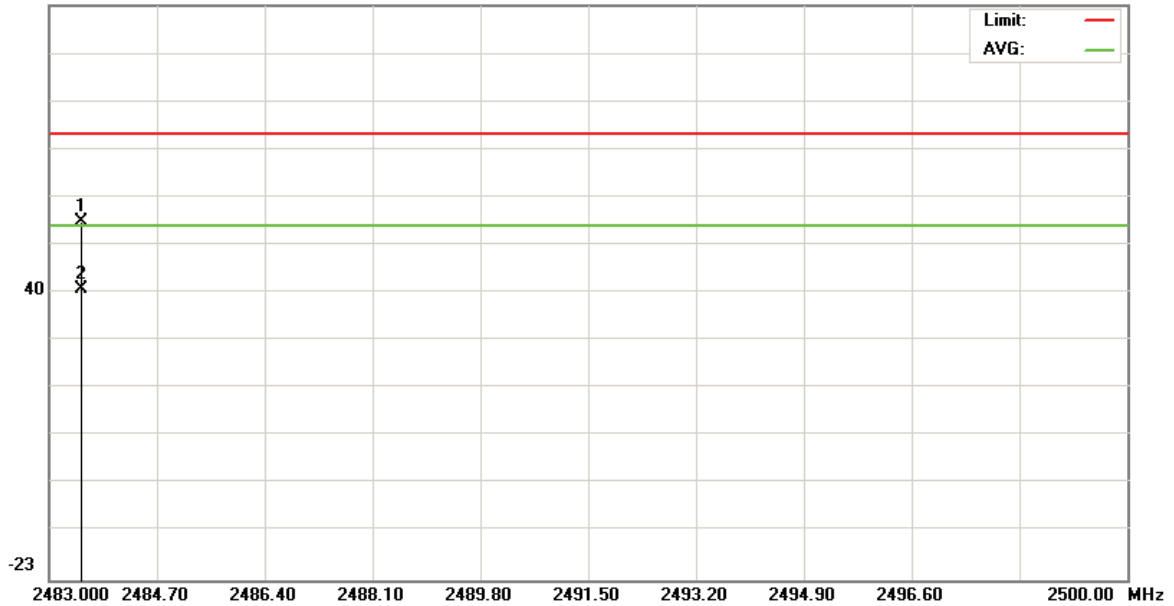
File :RS700(Band Edge)

Data :#3

Date: 2008/12/16

Time: 下午 12:29:07

102.0 dBuV



Site

Polarization: *Vertical*

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 3m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: 2462MHz , Antenna 100cm

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Antenna Height cm	Table Degree degree	Comment
1		2483.510	54.59	0.25	54.84	74.00	-19.16	peak		
2	*	2483.510	40.16	0.25	40.41	54.00	-13.59	AVG		

*:Maximum data x:Over limit !:over margin

●Reference Only



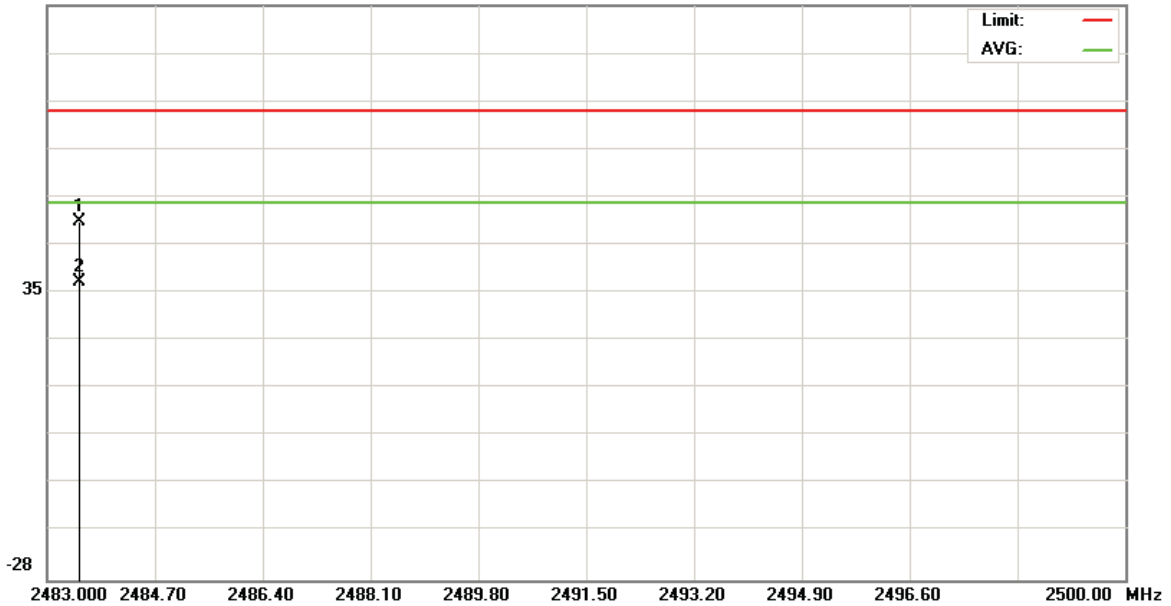
File :RS700(Band Edge)

Data :#7

Date: 2008/12/16

Time: 下午 12:35:30

97.0 dBuV



Site

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 3m

M/N: 08-0128-E

Mode: WIFI(11b)

Note: 2462MHz , Antenna 100cm

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	cm	degree	Comment
1		2483.510	49.67	0.25	49.92	74.00	-24.08	peak		
2	*	2483.510	36.54	0.25	36.79	54.00	-17.21	AVG		

*:Maximum data x:Over limit !:over margin

●Reference Only



8.4.2 Test Result:

Applicant : Unitech Electronics Co., Ltd.
Model No : RS700
EUT : Fixed Data Collection Terminal
Test Mode : 802.11g Low CH & High CH
Test Date : 12/22/2008

Please refer to next pager of detail testing data.

Notes:

1. Margin= Amplitude - Limits
2. Height of table for EUT placed: 0.8 Meter.
3. ANT= Antenna height.
4. Duty= Duty cycle correction factor.
5. Dis= Distance extrapolation factor.
6. Amplitude= Reading Amplitude - Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
7. Actual Amp= Amplitude - Duty - Dis.



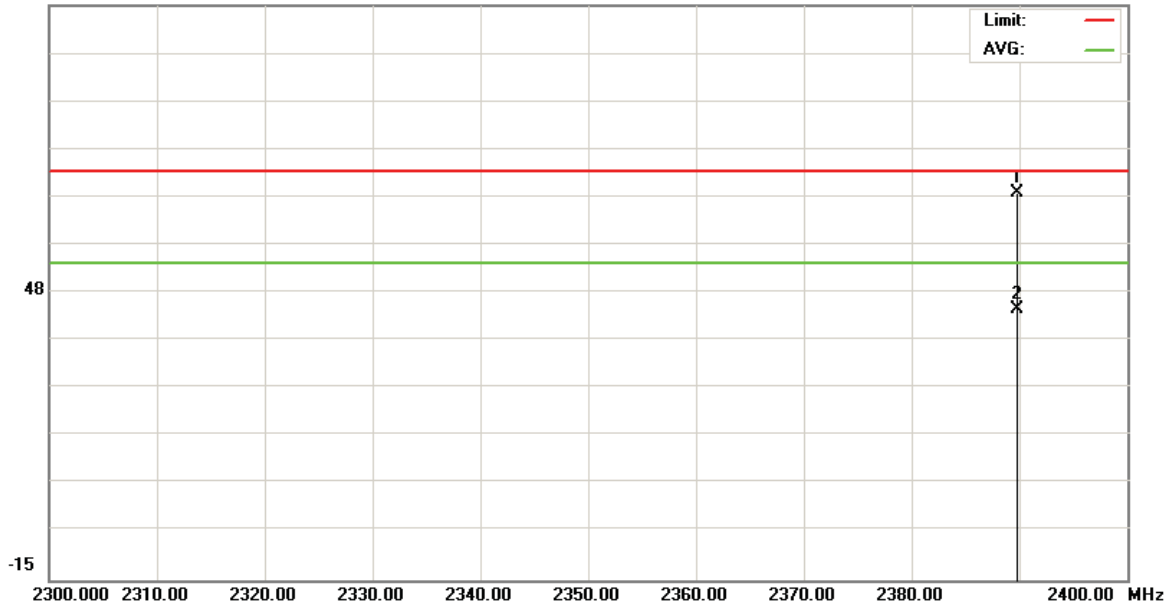
File :RS700(Band Edge)

Data :#1

Date: 2008/12/22

Time: 下午 02:44:38

110.0 dBuV



Site

Polarization: *Vertical*

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 3m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH01(2412MHz) · Antenna 100cm

2.7G-10G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	2389.800	69.19	0.16	69.35	74.00	-4.65	peak			
2		2389.800	43.69	0.16	43.85	54.00	-10.15	AVG			

*:Maximum data x:Over limit !:over margin

●Reference Only



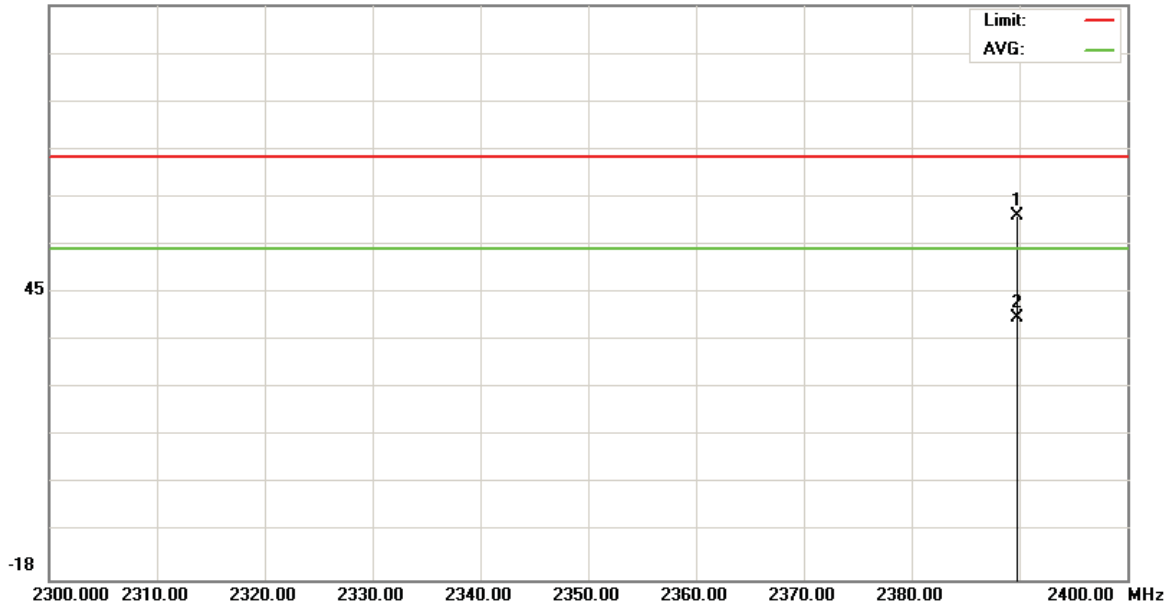
File :RS700(Band Edge)

Data :#5

Date: 2008/12/22

Time: 下午 02:59:54

107.0 dBuV



Site

Polarization: *Horizontal*

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 3m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH01(2412MHz) · Antenna 166.7cm

2.7G-10G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	2389.800	61.03	0.16	61.19	74.00	-12.81	peak		
2		2389.800	38.95	0.16	39.11	54.00	-14.89	AVG		

*:Maximum data x:Over limit !:over margin

●Reference Only



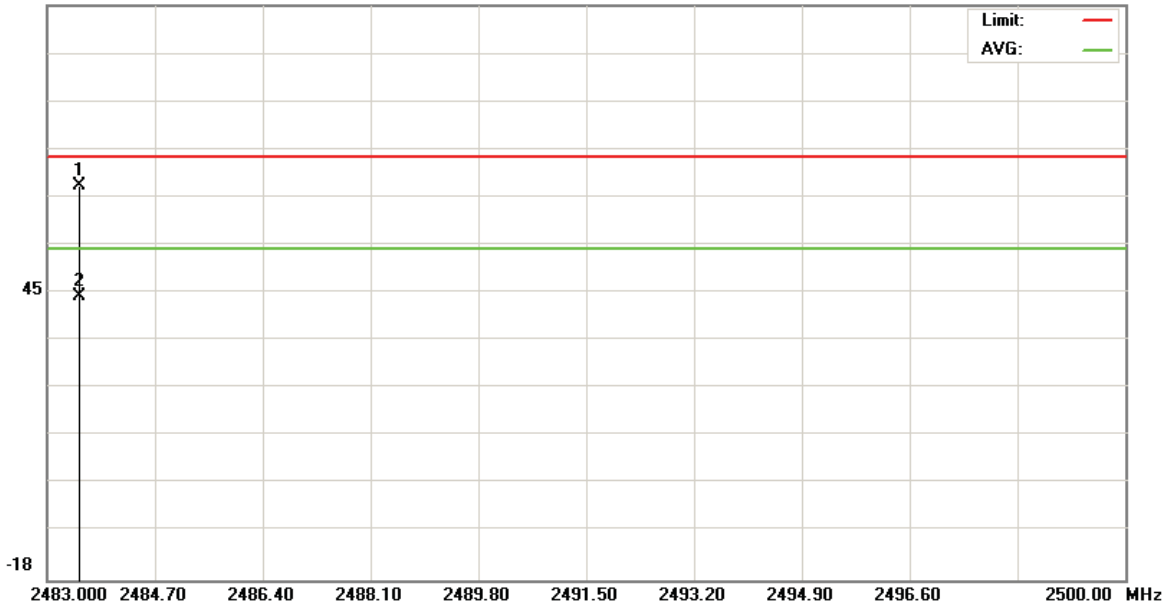
File :RS700(Band Edge)

Data :#3

Date: 2008/12/22

Time: 下午 03:17:20

107.0 dBuV



Site

Polarization: *Vertical*

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 3m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH11(2462MHz) · Antenna 100cm

2.7G-10G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	2483.510	67.60	0.25	67.85	74.00	-6.15	peak			
2		2483.510	43.51	0.25	43.76	54.00	-10.24	AVG			

*:Maximum data x:Over limit !:over margin

●Reference Only



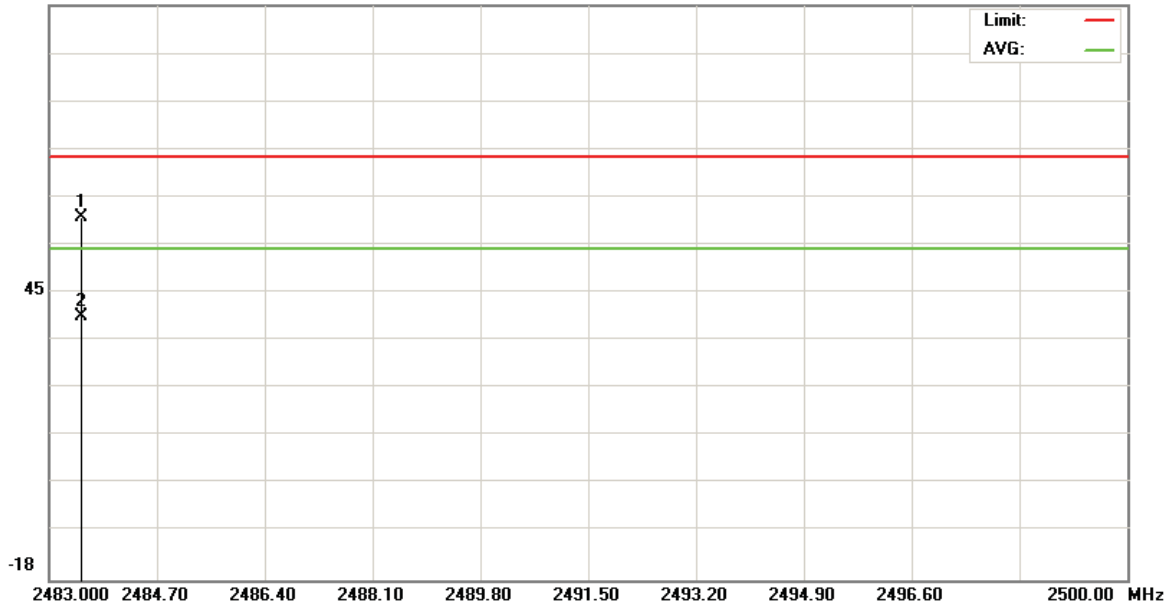
File :RS700(Band Edge)

Data :#7

Date: 2008/12/22

Time: 下午 03:27:42

107.0 dBuV



Site

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT:

Distance: 3m

M/N: 08-0128-E

Mode: WIFI(11g)

Note: CH11(2462MHz) · Antenna 100cm

2.7G-10G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	2483.510	60.75	0.25	61.00	74.00	-13.00	peak			
2		2483.510	39.18	0.25	39.43	54.00	-14.57	AVG			

*:Maximum data x:Over limit !:over margin

●Reference Only



9. Antenna Requirements

9.1 Standard Applicable:

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.

And According to 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

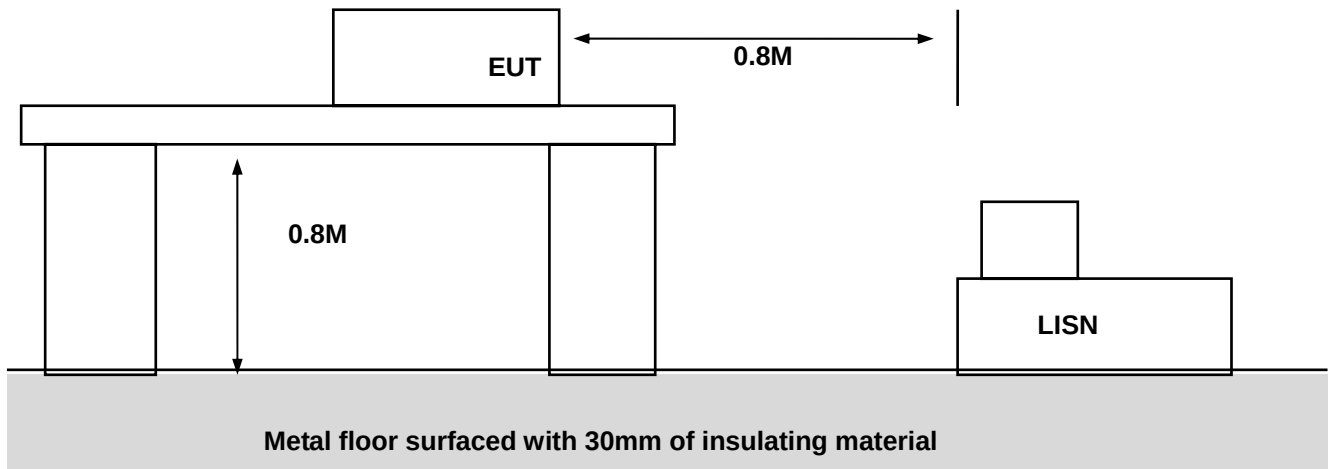
9.2 Antenna Connector Construction

The antenna used in this product is external Whip antenna and RP rf connector complied with the 15.203 requirements. The maximum Gain of this antenna is only 2.2 dBi.



Appendix A - EUT Test SETUP

MEASUREMENT OF POWER LINE CONDUCTED RFI VOLTAGE



MEASUREMENT OF RADIATED EMISSION

