Certificate of Test

November 2004

Sunrex Technology Corp.

Product Type	**: Wireless Keyboard**
Model Number	**: RK 0410**
Test Report Number	**: GTK-0410078**
Date of Test	**: October 20, 2004- November 02, 2004**

This Product was tested to the following standards at the laboratory of Global EMC Standard Tech. Corp., and found Compliance.

Standards:
FCC Part 15 Subpart B Paragraph 15.249
ANSI C63.4: 2001

http : //www.gestek.com.tw

Sharon Chang, President

Date: November 03, 2004

GesTek EMC Lab
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Accredited Laboratory

1082
ILAC MRA

Test Report Application for Certification

On Behalf Of

Sunrex Technology Corp.

EUT:
Wireless Keyboard

Model Number:
RK 0410

FCC ID:
J750410

Prepared for:

SUNREX TECHNOLOGY CORP.

No. 188-1, Chung Cheng Rd., Ta Ya Shiang, Taichung Hsien, Taiwan, R.O.C.

Report By :Global EMC Standard Tech. Corp.
No.3 Pau-Tou-Tsuo Valley, Chia-Pau Tsuen, Lin Kou Hsiang, Taipei County, Taiwan, R.O.C.
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1. CERTIFICATION

Applicant : Sunrex Technology Corp.

EUT Description	: Wireless Keyboard
Model Number	: RK 0410
Serial Number	: N/A
Brand Name	: Sunrex
FCC ID	: J750410
Tested Power Supply	: DC 4.5V
Manufacturer	: SUNREX TECHNOLOGY CORP.
Manufacturer Address	: No. 188-1, Chung Cheng Rd., Ta Ya Shiang, Taichung Hsien, Taiwan, R.O.C.

MEASUREMENT PROCEDURES USED:

☑ **CFR 47, Part 15**	Radio Frequency Device Subpart C Intentional Radiators :2003
☑ **ANSI C63.4**	Methods of Measurements of Radio-Noise Emissions from Low- Voltage Electrical and Electronic Equipment in the range of 9kHz To 40GHz. 2001

THE MEASUREMENT SHOWN IN THE ATTACHMENT WAS MADE IN ACCORDANCE WITH THE PROCEDURES INDICATED, AND THE MAXIMUM ENERGY EMITTED BY THE EQUIPMENT WAS FOUND TO BE WITHIN THE ABOVE LIMITS APPLICABLE.

1082
ILAC MRA

Sample Received Date : **October 20, 2004**
Final Test Date : **November 02, 2004**

In order to ensure the quality and accuracy of this document, the contents have been thoroughly reviewed by the following qualified personnel from GesTek Lab.

Documented By :
Rini Chen / adm. Dept. Supervisor

Test By :
John Wu / eng. Dept. Engineer

Technical Reviewed By :
Shine Chang / eng. Dept. Supervisor

Approved By :
Tonny Lin / General Manager

This test data shown below is traceable to National or international standard such as NIST/USA, etc. The laboratory's NVLAP accreditation in no way constitutes or implies product certification, approval, or endorsement by NVLAP or the United States government.

2. GENERAL INFORMATION

2.1 PRODUCTION DESCRIPTION

Product Name : Wireless Keyboard
Model Number : RK 0410
Serial Number : N/A
Brand Name : Sunrex
FCC ID : J750410
Modulation Type : FSK
Antenna Type : Printed on PCB
Frequencg Range : 2.4019 GHz
Channel Number 1 Channel
Channel Control Manual
Working Voltage : Battery DC 4.5V

Frequency of Each Channel:

Channel	Frequency (GHz)
1	2.4019

Note:

1. This device is a 2.4019GHz Wireless Keyboard included wireless transmition of keyboard and receiver. The test report is for transmitter.
2. This device is one channel and perform the test, then record on this report.
3. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.249.
4. The device of receiver to accordance with Part 15 regulations and under Declaration of Conformity and record of measurment in test report that the report number is 0410078FCC DOC.

2.2 OPERATIONAL DESCRIPTION

This device is Wireless Keyboard included wireless transmitter of keyboard and receiver, The powered by DC 4.5V batterys.
This device only one channel and operation in 2.4019GHz with FSK modulation.
The Receiver is usb interface can receive singal from transmitter to control PC or notebook .

2.3 TEST MODES & EUT COMPONENTS DESCRIPTION

EUT: Wireless Keyboard, M/N: RK 0410 The EUT tested with Notebook PC. (DELL, M/N: MTC2)	
Test Mode	**Mode 1**
Frequency	2.4019 GHz

2.4 CONFIGURATION OF THE TESTED SYSTEM

The FCC IDs/Types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards, which have grants) are:

Device	No.	Configuration
Modem	**M03-010**	Manufacturer : ACEEX Model Number : 1414 Serial Number : 960018043 BSMI ID : N/A FCC ID : IFAXDM1414 Data Cable : Type:RS232, Shielded, Detachable, 1.2m Power Cord : Non-Shielded, Detachable, 1.5m Line : Type:RJ11(4P2C), Detachable, 1.8m Phone : Type:RJ11(4P2C), Detachable, 1.8m
D-Sub Monitor	**M01-029**	Manufacturer : ADI Model Number : MICRO SCAN G1000 Serial Number : N/A BSMI ID : 3892A351 FCC ID : N/A Data Cable : Shielded, detachable, 1.5m, VGA Cable Power Cord : 3Pin, Shielded, Detachable, 1.5m
PS2 Keyboard	**K01-091**	Manufacturer : IBM Model Number : SK-8811 Serial Number : 01979618 BSMI ID : 3902B330 FCC ID : N/A Data Cable : Shielded, Undetachable, 1.8 m
PS2 Mouse	**M02-299**	Manufacturer : IBM Model Number : MU29J Serial Number : 23021308 BSMI ID : 3902A581 FCC ID : N/A Data Cable : Shielded, Undetachable, 1.5m
USB Mouse	**M02-252**	Manufacturer : Logitech Model Number : M-U48A BSMI ID : 4882A177 FCC ID : JNZ211360 Data Cable : Shielded, Undetachable, 1.5m
USB Mouse	**M02-258**	Manufacturer : Logitech Model Number : M-U48A BSMI ID : 4882A177 FCC ID : JNZ211360 Data Cable : Shielded, Undetachable, 1.5m
Cassette Recorder	**R02-033**	Manufacturer : PANASONIC Model Number : RQ-L11LT Serial Number : N/A BSMI ID : R31017 FCC ID : N/A Power Cord : N/A (Battery 1.5V*2)

Device	No.	Configuration
USB Mouse	**M02-222**	Manufacturer : Logitech Model Number : M-U48A BSMI ID : 4882A177 FCC ID : JNZ211360 Data Cable : Shielded, Undetachable, 1.5m
Cassette Recorder	**R02-034**	Manufacturer : PANASONIC Model Number : RQ-L11LT Serial Number : N/A BSMI ID : R31017 FCC ID : N/A Power Cord : N/A (Battery 1.5V*2)
Headset & Earphone	**E01-079**	Manufacturer : TOKYO Model Number : SX-M1 Serial Number : N/A Data Cable : Non-Shielded, Undetachable, 1.8 m Power Cord : N/A Purchase Date : 2/22/1999
USB Mouse	**M02-216**	Manufacturer : Logitech Model Number : M-U48A BSMI ID : 4882A177 FCC ID : JNZ211360 Data Cable : Shielded, Undetachable, 1.5m
USB Mouse	**M02-274**	Manufacturer : Logitech Model Number : M-U48A BSMI ID : 4882A177 FCC ID : JNZ211360 Data Cable : Shielded, Undetachable, 1.5m
Printer	**P01-016**	Manufacturer : Hewlett Packard Model Number : 2225C Serial Number : 2548S40426 BSMI ID : 3892A957 FCC ID : BS46XU2225C Data Cable : Shielded, Detachable, 1.2m, Parallel Cable Power Cord : Non-Shielded, Detachable, 1.8m
PC System	**DELL PC 2**	Model Number : MTC2 BSMI ID : R33002 Serial Number : 6B3D81S C.P.U : Intel Celeron 2.2GHz/400MHz D.D.R : PC2100 128M F.D.D : N/A H.D.D. : Manufacturer : Western Digital 40G M/N: WD400EB, S/N: WMAATE180838 BSMI ID: D33005 CD-ROM : H.L.Data Storage M/N:GCR-8481B BSMI ID :33017 Mother Board : DELL M/N: BLUFORD P/N:411726100004 S.P.S : DELL, M/N: PS-5022-2DF 200W S/N:00134476 100-120V 6A , 200-240V 3A 50-60Hz Power Cord : Non-Shielded, Detachable, 1.5m

2.5 TEST FACILITY

Ambient conditions in the laboratory:

ITEMS	REQIORED(IEC 68-1)	ACTUAL
TEMPERATURE (°C)	15-35	24-27
HUMIDITY (%RH)	25-75	50-65
BAROMETRIC PRESSURE (mbar)	860-1060	950-1000
FCC SITE DESCRIPTION	Aug. 10, 1995 /Aug. 25, 1998 File on FCC Engineering Laboratory Federal Communication Commission 7435 Oakland Mills Road Columbia, MD 21046 Reference 31040/SIT1300F2	
NVLAP LAB. CODE	200085-0 United Stated Department of commerce National Institute of Standards and Technology National Voluntary Laboratory Accreditation Program Accreditation on NVLAP effective through Sep. 30,2005 For CISPR 22, FCC Method and AS/NZS 3548 Measurement.	
Chinese National Laboratory Accreditation Certificate R.O.C. CNLA **1082** **ILAC MRA**	Recognized by the Council of Chinese National Laboratory Accreditation and confirmed to meet the requirements of ISO/IEC 17025 also has been registered for fifteen items, and meet the requirements of the Article 4 of Measures Governing the Recognition both Approval of Designated Laboratory for Commodities Inspection and has been registered for four items within the field of Electrical Testing. Registration No.: 1082 Registration on CNLA effective through April 30, 2006.	

2.6 TEST SETUP

EUT: Wireless Keyboard

2.7 EUT OPERATING CONDITIONS

The EUT exercise program used during conducted testing was designed to exercise the EUT in a manner similar to a typical use. The exercise sequence is listed as below:

1. Setup the EUT and simulators as shown on 2.6.
2. Turn on the power of all equipments.
3. The transmitter will transmit the signal continue.
4. Confirm the receiver is reveive signal continue.
5. Repeat the above steps.

3. RADIATION EMISSION DATA

3.1 TEST EQUIPMENT

The following test equipments are used during the radiated emission tests:

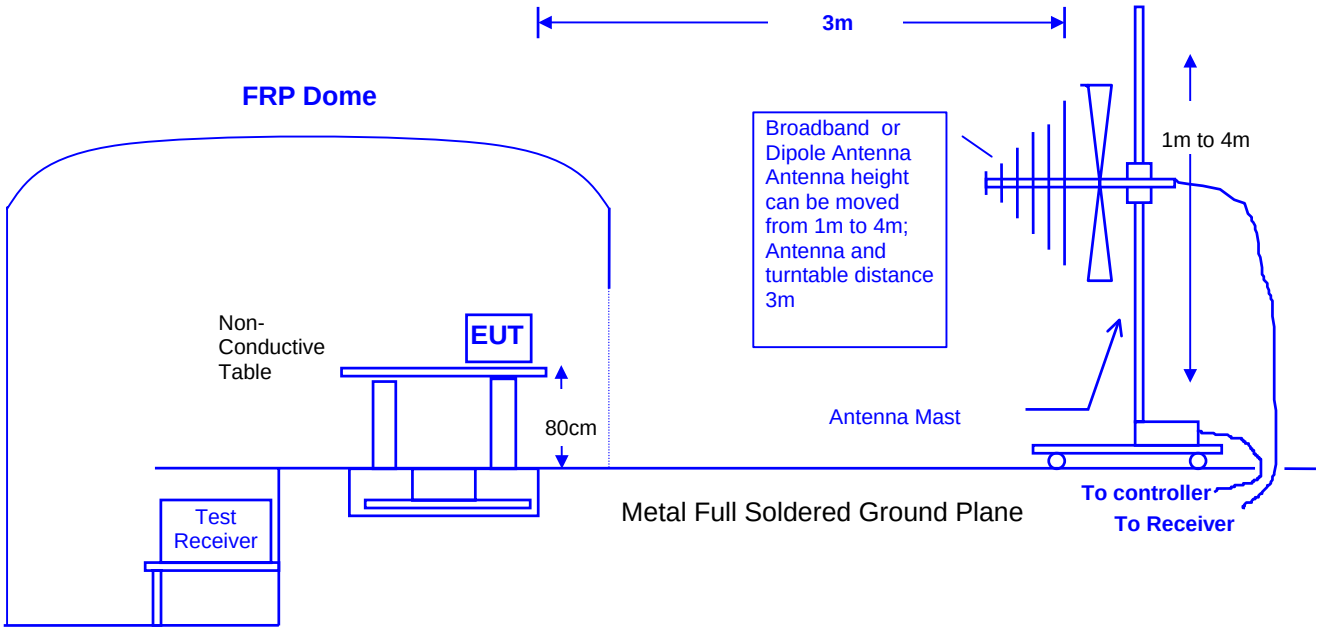
Radiated test was performed on: ☒Site #1 ☐Site #2 ☐Site #3 ☐Site #4

Item	Instrument	Manufacturer	Model	Serial No.	Last Cal.
1	Test Receiver	Rohde & Schwarz	ESCS30	825022/003	06/26/04
2	Spectrum Analyzer	Rohde & Schwarz	FSP40	100061	03/16/04
3	Spectrum Analyzer	HP	E4407B	39240339	07/28/04
4	Power Meter	Rohde & Schwarz	NRVS	100666	04/29/04
5	Peak Power Sensor	Rohde & Schwarz	NRV-Z32	8360191058	04/29/04
6	Pre-Amplifier	HP	8449B	3008A01263	03/10/04
7	BILOG ANTENNA	SCHAFFNER	CBL6112B	2620	12/01/03
8	Horn Antenna	Electro-Metrics	EM-6961	103318	02/19/04
9	Horn Antenna	Schwarzbeck	BBHA 9120	D243	12/18/03
10	RF Cable	GesTek	N/A	GTK-E-A151-01	02/09/04
11	Open Site	GesTek	N/A	B1	11/25/03
12	Test Program Software	GesTek	N/A	GTK-E-S001-01	N/A

Note: All measurement critical items of test instrumentation were within their calibration period of 1 year.

3.2 OPEN TEST SITE SETUP DIAGRAM

Note: This is a reprehensive setup diagram for Table-top EUT.
For Floor-standing EUT, the table will be removed with all others setup condition remain the same.



3.3 RADIATED EMISSION LIMIT

☒ General Radiated Emission Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

Frequency	Distance	Field Strength	
MHz	Meter	μV/M	dBμV/M
30 to 88	3	100	40.0
88 to 216	3	150	43.5
216 to 960	3	200	46.0
Above 960	3	500	54.0

Remarks :

1. RF Voltage (dBuV/m) = 20 log RF Voltage (uV/m)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

☒ Fundamental and Harmonics Emission Limits

Frequency	Distance	Field Strength of Fundamental		Field Strength of Harmonics	
MHz	Meter	μV/M	dBμV/M	μV/M	dBμV/M
902-928	3	50	94	500	54
2400-2483.5	3	50	94	500	54
5725-5875	3	50	94	500	54

Remarks :

1. RF Voltage (dBuV/m) = 20 log RF Voltage (uV/m)
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

3.4 EUT CONFIGURATION

The equipment which is listed 2.6 are installed on Radiated Emission Test to meet the Commission requirement and operating in a manner which tends to maximize its emission characteristics in a normal application.

The device under test, installed in a representative system as described in section 3.2, was placed on a non-conductive table whose total height equaled 80 cm. This table can be rotated 360 degree. The measurement antenna was mounted to a non-conductive mast capable of moving the antenna vertically. Antenna height was varied from 1 meter to 4 meters and the system under test was rotated from 0 degree through 360 degrees relative to the antenna position and polarization (Horizontal and Vertical). Also the I/O cable position was investigated to find the maximum emission condition.

3.5 OPERATING CONDITION OF EUT

Same as section 2.7.

3.6 RADIATED EMISSION DATA

The measurement range of radiated emission, which is from **30 MHz to 10 Harminics,** was investigated. All readings below 1GHz are quasi-peak values with a resolution bandwidth of 120 KHz. Above 1GHz are peak and avg. values with a resolution bandwidth of 1MHz. The initial step in collecting radiated emission data is a spectrum analyzer peak scans of the measurement range for all the test modes and then use test receiver for final measurement. Then the worst modes were reported the following data pages.

3.7 RADIATED EMISSIONS MEASUREMENT RESULTS

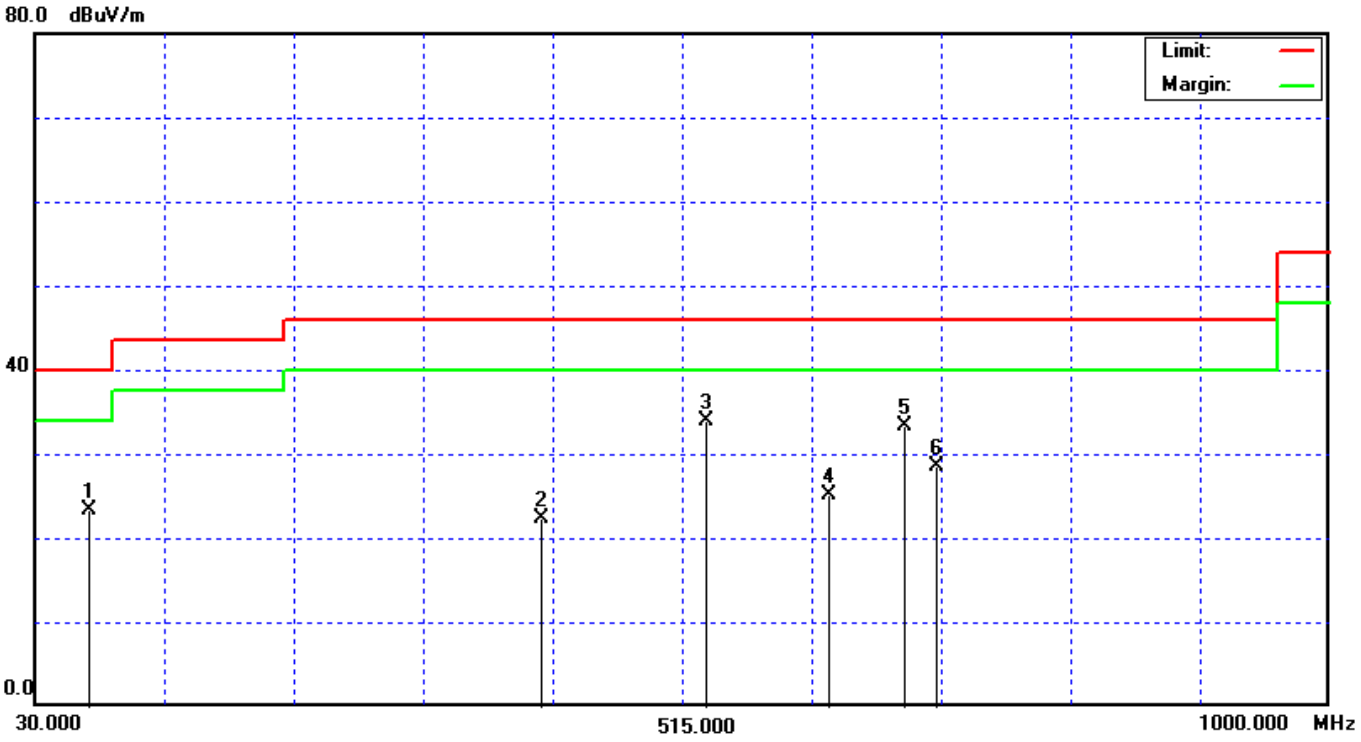
3.7.1 HARMONIC RADIATED EMISSIONS

Date of Test	November 02, 2004	**Temperature**	26 deg/C
EUT	Wireless Keyboard	**Humidity**	63 %RH
Working Cond.	Channel 1	**Display Pattern**	H Pattern
Antenna distance	3m at **Horizontal**	**Frequency Range**	30-1000MHz

No.	Frequency MHz	Reading Level dBuV/m	Factor dB	Measurement dBuV/m	Limit dBuV/m	Over Limit dB	Detector
1	69.985	39.8	-16.49	23.31	40	-16.69	QP
2	408.475	27.03	-4.82	22.21	46	-23.79	QP
3	★530.86	36.76	-2.78	33.98	46	-12.02	QP
4	625	26.53	-1.43	25.1	46	-20.9	QP
5	680.793	33.83	-0.44	33.39	46	-12.61	QP
6	705.5455	28.21	0.32	28.53	46	-17.47	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Emission Level= Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. The "★" means this data is worst-case Measurement level.

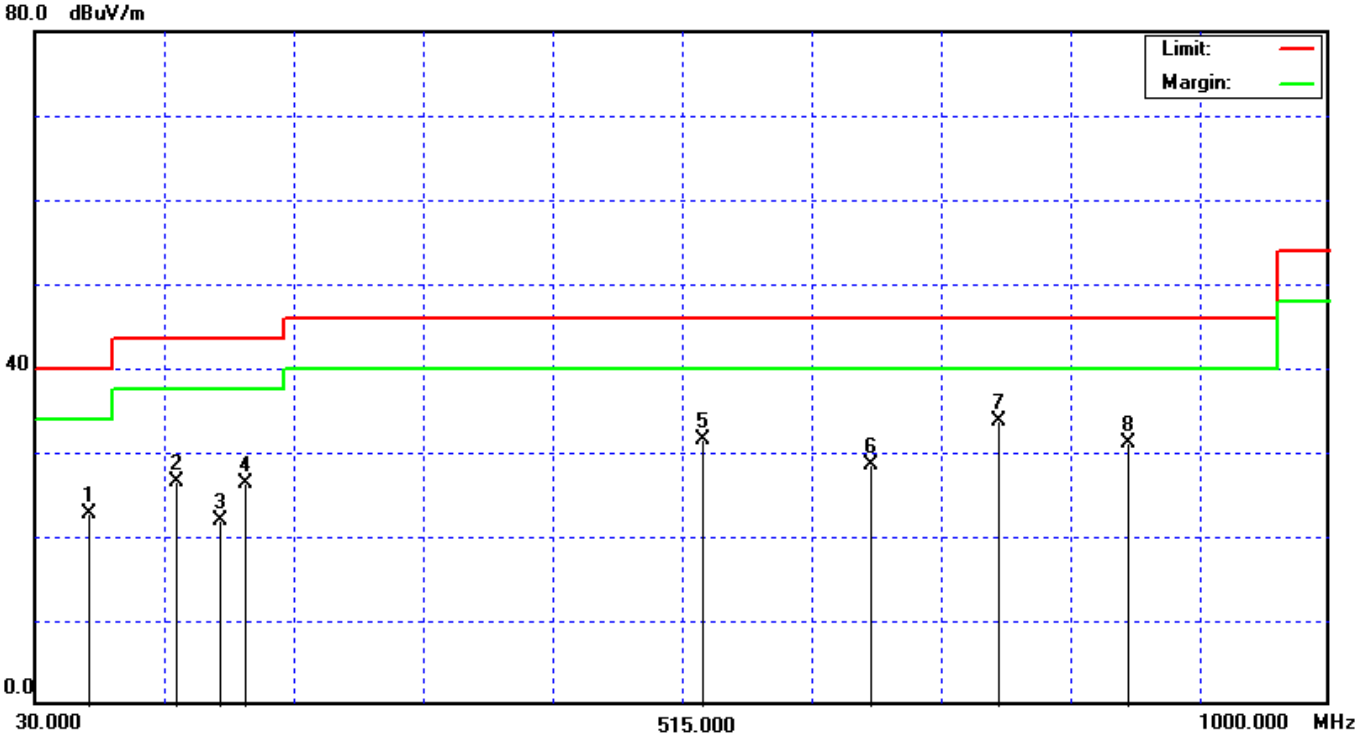


Date of Test	November 02, 2004	**Temperature**	26 deg/C
EUT	Wireless Keyboard	**Humidity**	63 %RH
Working Cond.	Channel 1	**Display Pattern**	H Pattern
Antenna distance	3m at **Vertical**	**Frequency Range**	30-1000MHz

No.	Frequency MHz	Reading Level dBuV/m	Factor dB	Measurement dBuV/m	Limit dBuV/m	Over Limit dB	Detector
1	69.995	39.1	-16.49	22.61	40	-17.39	QP
2	136.0895	37.16	-10.56	26.6	43.5	-16.9	QP
3	166.53	34.63	-12.72	21.91	43.5	-21.59	QP
4	185.663	39.19	-12.83	26.36	43.5	-17.14	QP
5	529.78	34.22	-2.8	31.42	46	-14.58	QP
6	656.033	29.08	-0.66	28.42	46	-17.58	QP
7	★749.928	32.52	1.11	33.63	46	-12.37	QP
8	848.2695	28.01	3.02	31.03	46	-14.97	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Emission Level= Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. The "★" means this data is worst-case Measurement level.



Date of Test	October 22, 2004	**Temperature**	21 deg/C
EUT	Wireless Keyboard	**Humidity**	60 %RH
Working Cond.	Channel 1	**Display Pattern**	H Pattern
Antenna distance	3m at **Horizontal**	**Frequency Range**	Above 1GHz

Peak

No.	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Limit [dB(uV/m)]	Margin [dB]
1	4803.75	53.52	-1.36	52.16	74.00	-21.84
2	7205.75	46.66	7.62	54.28	74.00	-19.72
3	9602.50	39.76	12.91	< 52.67	74.00	-21.33
4	12002.50	37.86	15.80	< 53.66	74.00	-20.34

Average

No.	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Limit [dB(uV/m)]	Margin [dB]
1	7205.70	40.85	7.62	48.47	54.00	-5.53

Remark

1. All Readings below 1GHz are Quasi-Peak and above 1GHz are peak or average.
2. Spectrum Analizyer Setting(Peak Detector): RBW=1MHz, VBW=1MHZ, Span=100MHz.
3. Spectrum Analizyer Setting(AVG Detector): RBW=1MHz, VBW=30HZ, Span=20MHz.
4. Emission Level= Reading + Correction Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
5. Correction Factor= Antenna Factor + Cable Loss – Amplifier Factor
6. Margin Value=Emission level-Limit value.
7. The average measurement was not performed when the peak measured data under the limit of average detection. If the average value is measured, peak measurement should also be supplied.

Date of Test	October 22, 2004	**Temperature**	21 deg/C
EUT	Wireless Keyboard	**Humidity**	60 %RH
Working Cond.	Channel 1	**Display Pattern**	H Pattern
Antenna distance	3m at **Vertical**	**Frequency Range**	Above 1GHz

Peak

No.	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Limit [dB(uV/m)]	Margin [dB]
1	4803.75	53.48	-1.90	51.57	74.00	-22.43
2	7205.75	48.01	7.18	55.19	74.00	-18.81
3	9602.00	38.04	13.75	< 51.79	74.00	-22.21
4	12002.00	37.54	14.74	< 52.28	74.00	-21.72

Average

No.	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Limit [dB(uV/m)]	Margin [dB]
1	7205.70	40.95	7.18	48.13	54.00	-5.87

Remark

1. All Readings below 1GHz are Quasi-Peak and above 1GHz are peak or average.
2. Spectrum Analizyer Setting(Peak Detector): RBW=1MHz, VBW=1MHZ, Span=100MHz.
3. Spectrum Analizyer Setting(AVG Detector): RBW=1MHz, VBW=30HZ, Span=20MHz.
4. Emission Level= Reading + Correction Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
5. Correction Factor= Antenna Factor + Cable Loss – Amplifier Factor
6. Margin Value=Emission level-Limit value.
7. The average measurement was not performed when the peak measured data under the limit of average detection. If the average value is measured, peak measurement should also be supplied.

3.7.2 FUNDAMEDTAL RADIATED EMISSIONS

Date of Test	October 20, 2004	**Temperature**	21 deg/C
EUT	Wireless Keyboard	**Humidity**	60 %RH
Working Cond.	Channel 1		
Antenna distance	3m		

Horizontal

No.	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Limit [dB(uV/m)]	Margin [dB]
1	2402.00	74.95	-0.93	74.02	114.00	-39.98

Vertical

No.	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Limit [dB(uV/m)]	Margin [dB]
1	2402.00	82.39	-6.04	76.35	114.00	-37.65

Remark

1. All Readings below 1GHz are Quasi-Peak and above 1GHz are peak or average.
2. Spectrum Analizyer Setting(Peak Detector): RBW=1MHz, VBW=1MHZ, Span=100MHz.
3. Spectrum Analizyer Setting(AVG Detector): RBW=1MHz, VBW=30HZ, Span=20MHz.
4. Emission Level= Reading + Correction Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
5. Correction Factor= Antenna Factor + Cable Loss – Amplifier Factor
6. Margin Value=Emission level-Limit value.
7. The average measurement was not performed when the peak measured data under the limit of average detection. If the average value is measured, peak measurement should also be supplied.

4. BAND EDGE

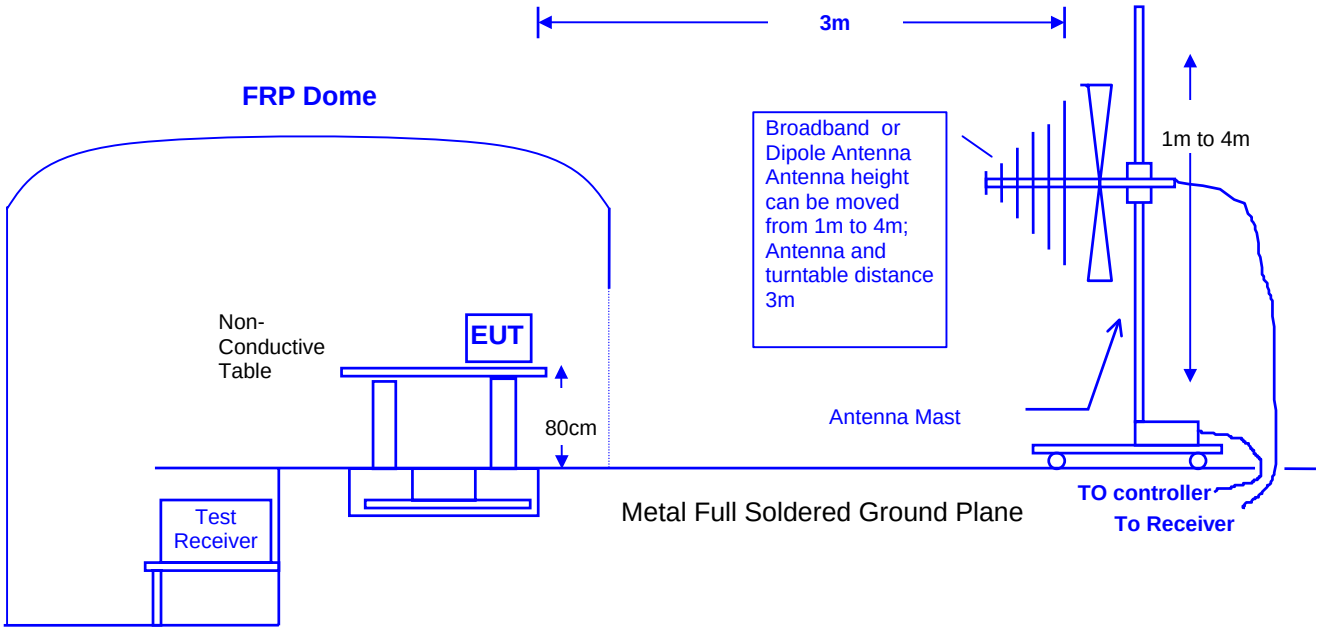
4.1 TEST EQUIPMENT

Item	Instrument	Manufacturer	Model	Serial No.	Last Cal.
1	Test Receiver	Rohde & Schwarz	ESVS30	829007/014	12/13/03
2	Spectrum Analyzer	Advantest	R3272	82420232	02/14/03
3	Spectrum Analyzer	HP	E4407B	39240339	08/16/03
4	Power Meter	Rohde & Schwarz	NRVS	100666	04/29/04
5	Power Sensor	Rohde & Schwarz	NRV-Z32	8360191058	04/29/04
6	Pre-Amplifier	HP	8447D	2944A08273	10/09/04
7	Horn Antenna	Electro-Metrics	EM-6961	103318	02/19/04
8	Horn Antenna	Schwarzbeck	BBHA 9120	D243	12/18/03
9	RF Cable	GesTek	N/A	GTK-E-A149-01	12/26/03
10	Open Site	GesTek	N/A	A2	12/10/03
11	Test Program Software	GesTek	N/A	GTK-E-S001-01	N/A

Note: All measurement critical items of test instrumentation were within their calibration period of 1 year.

4.2 BLOCK DIAGRAM OF TEST SETUP

◎ RF Radiated Measurement: ◎



4.3 BAND EDGE LIMIT

In any 100KHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 50dB below that in the 100KHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209 (a) (see Section 15.205(c)).

4.4 EUT CONFIGURATION

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4:2000 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter is 120KHz, above 1GHz are 1MHz.

4.5 OPERATING CONDITION OF EUT

Same as section 2.7.

4.6 TEST RELULT

Date of Test	October 20, 2004	**Temperature**	21 deg/C
EUT	Wireless Keyboard	**Humidity**	60 %RH
Working Cond.	Channel 1		
Antenna distance	3m at **Horizontal**		

Peak

No.	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Limit [dB(uV/m)]	Margin [dB]
1	2400.00	53.95	-0.94	53.01	74	-20.99
2	2401.87	77.46	-0.93	76.53	N/A	N/A

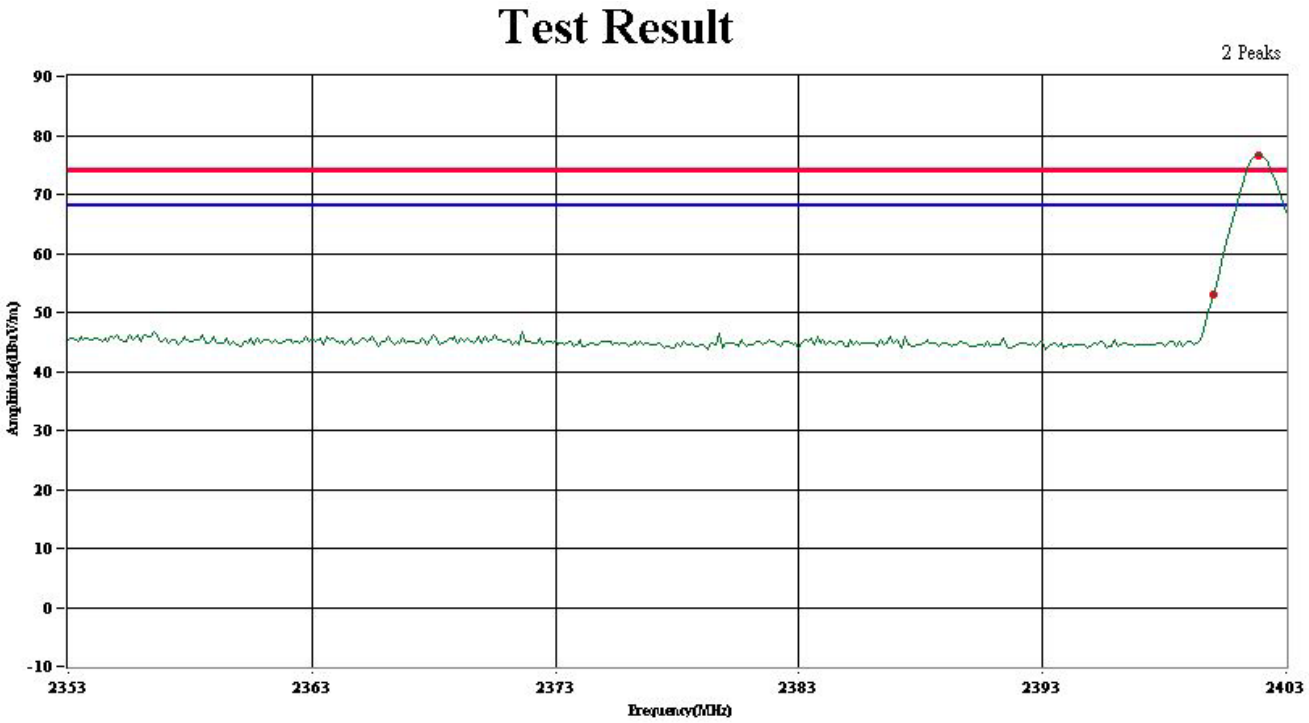
Average

No.	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Limit [dB(uV/m)]	Margin [dB]
1	2400.00	51.95	-0.94	51.01	54	-2.99
2	2401.87	77.41	-0.93	76.48	N/A	N/A

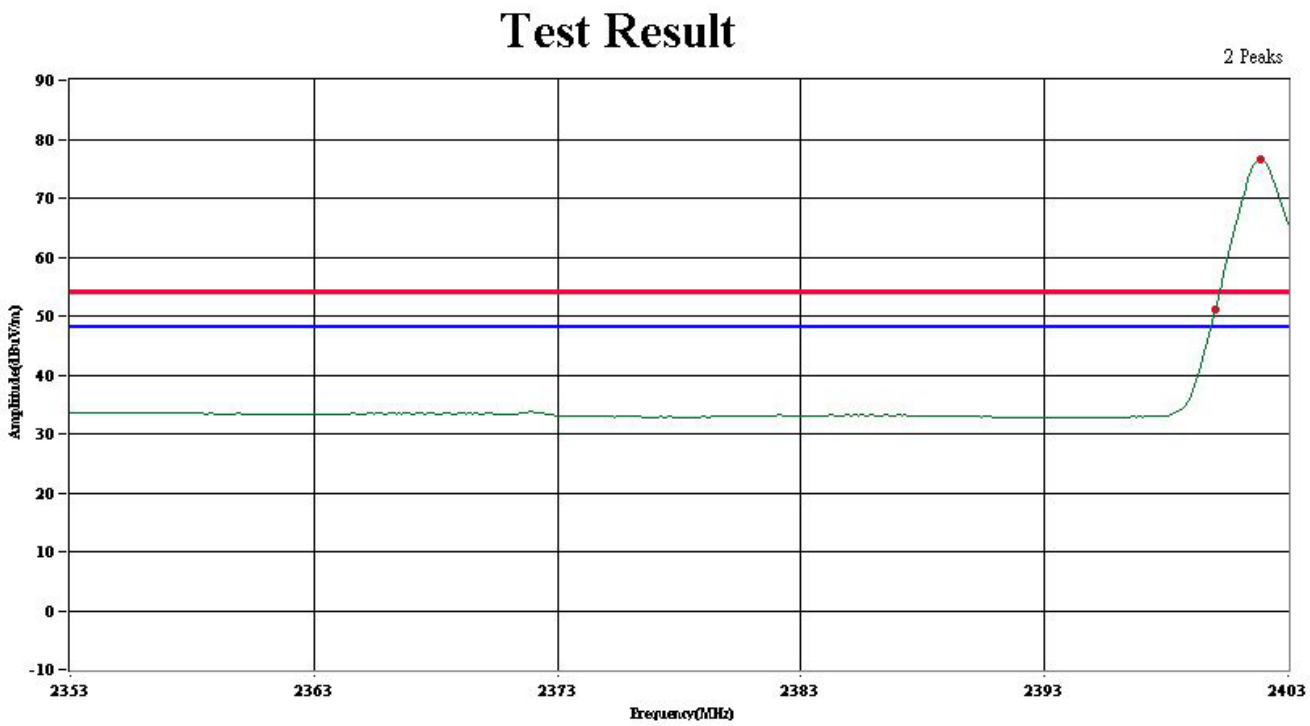
Remark

1. All Readings below 1GHz are Quasi-Peak and above 1GHz are peak or average.
2. Spectrum Analizyer Setting(Peak Detector): RBW=1MHz, VBW=1MHZ, Span=100MHz.
3. Spectrum Analizyer Setting(AVG Detector): RBW=1MHz, VBW=30HZ, Span=20MHz.
4. Emission Level= Reading + Correction Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
5. Correction Factor= Antenna Factor + Cable Loss – Amplifier Factor
6. Margin Value=Emission level-Limit value.
7. The average measurement was not performed when the peak measured data under the limit of average detection. If the average value is measured, peak measurement should also be supplied.

Horizontal / Peak



Horizontal / Average



Date of Test	October 20, 2004	**Temperature**	21 deg/C
EUT	Wireless Keyboard	**Humidity**	60 %RH
Working Cond.	Channel 1		
Antenna distance	3m at **Vertical**		

Peak

No.	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Limit [dB(uV/m)]	Margin [dB]
1	2400.00	59.95	-6.04	53.91	74	-20.09
2	2401.87	83.80	-6.04	77.76	N/A	N/A

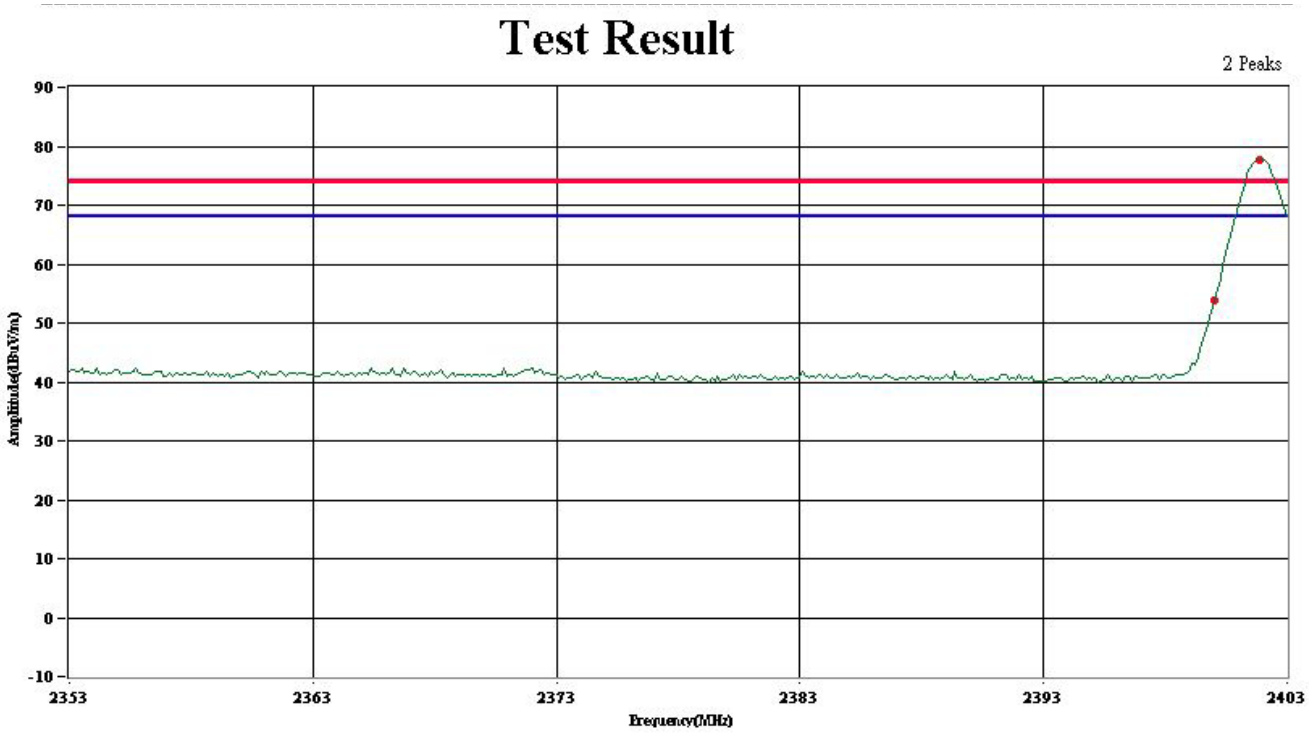
Average

No.	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Limit [dB(uV/m)]	Margin [dB]
1	2400.00	57.97	-6.04	51.93	54	-2.07
2	2401.87	83.62	-6.04	77.58	N/A	N/A

Remark

1. All Readings below 1GHz are Quasi-Peak and above 1GHz are peak or average.
2. Spectrum Analizyer Setting(Peak Detector): RBW=1MHz, VBW=1MHZ, Span=100MHz.
3. Spectrum Analizyer Setting(AVG Detector): RBW=1MHz, VBW=30HZ, Span=20MHz.
4. Emission Level= Reading + Correction Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
5. Correction Factor= Antenna Factor + Cable Loss – Amplifier Factor
6. Margin Value=Emission level-Limit value.
7. The average measurement was not performed when the peak measured data under the limit of average detection. If the average value is measured, peak measurement should also be supplied.

Vertical/ Peak



Vertical / Average

Date of Test	October 20, 2004	**Temperature**	21 deg/C
EUT	Wireless Keyboard	**Humidity**	60 %RH
Working Cond.	Channel 1		
Antenna distance	3m at **Horizontal**		

Peak

No.	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Limit [dB(uV/m)]	Margin [dB]
1	2401.89	76.74	-0.93	75.81	N/A	N/A
2	2483.40	41.59	-0.44	41.15	74.00	-32.85
3	2490.59	43.88	-0.40	43.48	74.00	-30.52

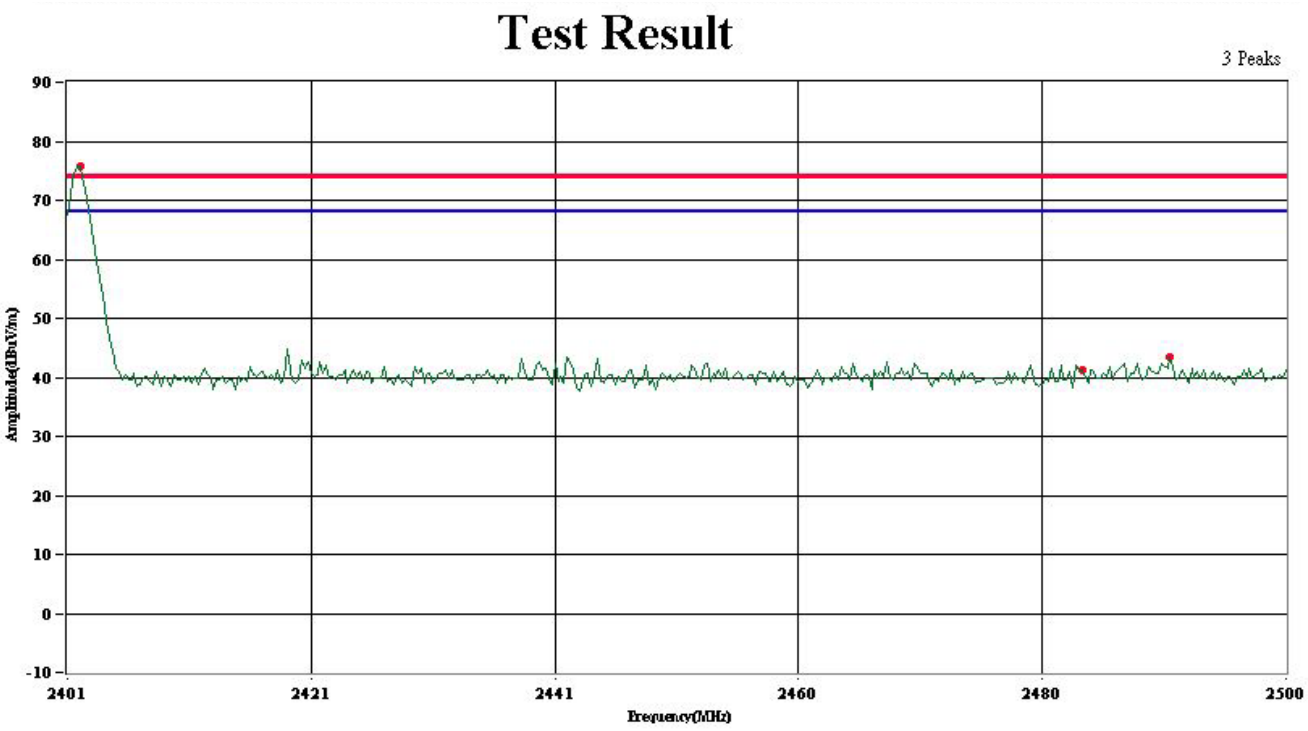
Average

No.	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Limit [dB(uV/m)]	Margin [dB]
1	2401.89	77.36	-0.93	76.43	N/A	N/A
2	2483.65	34.35	-0.44	33.91	54.00	-20.09
3	2484.89	34.54	-0.43	34.11	54.00	-19.89

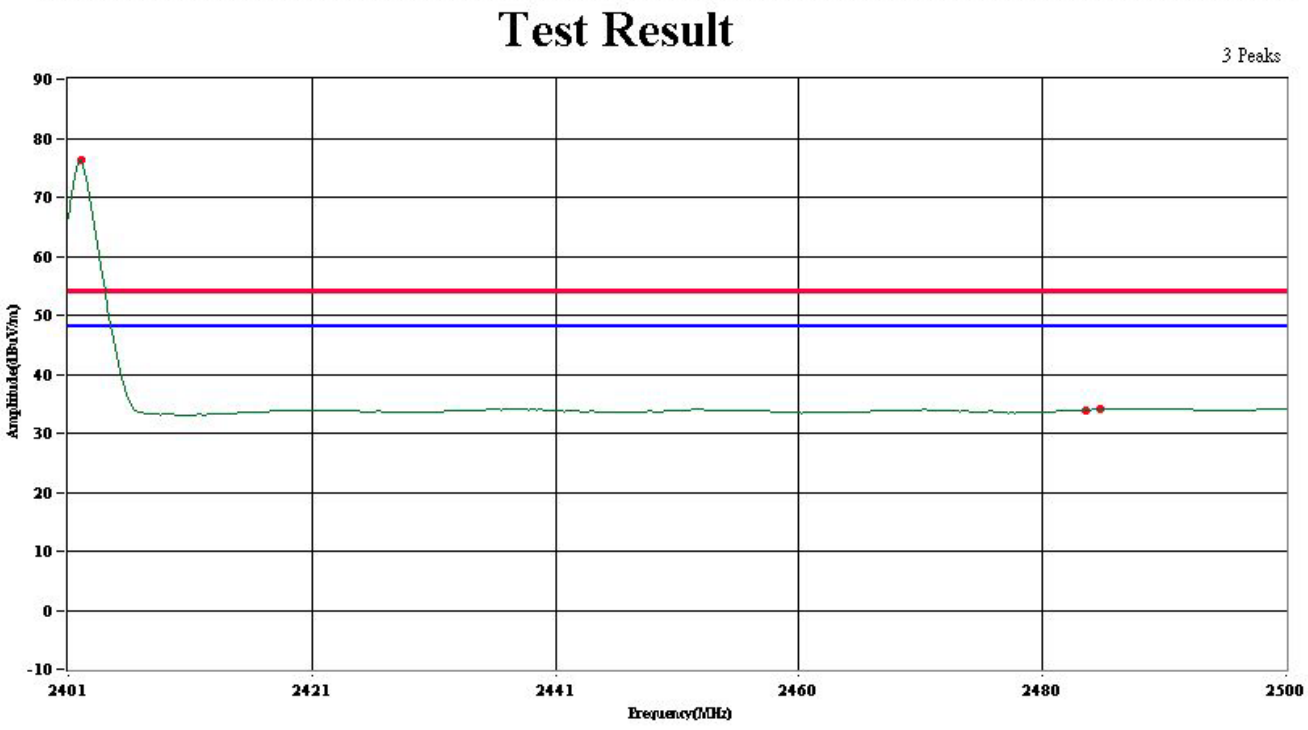
Remark

1. All Readings below 1GHz are Quasi-Peak and above 1GHz are peak or average.
2. Spectrum Analizyer Setting(Peak Detector): RBW=1MHz, VBW=1MHZ, Span=100MHz.
3. Spectrum Analizyer Setting(AVG Detector): RBW=1MHz, VBW=30HZ, Span=20MHz.
4. Emission Level= Reading + Correction Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
5. Correction Factor= Antenna Factor + Cable Loss – Amplifier Factor
6. Margin Value=Emission level-Limit value.
7. The average measurement was not performed when the peak measured data under the limit of average detection. If the average value is measured, peak measurement should also be supplied.

Horizontal / Peak



Horizontal / Average



Date of Test	October 20, 2004	**Temperature**	21 deg/C
EUT	Wireless Keyboard	**Humidity**	60 %RH
Working Cond.	Channel 1		
Antenna distance	3m at **Vertical**		

Peak

No.	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Limit [dB(uV/m)]	Margin [dB]
1	2401.89	83.68	-6.04	77.64	74.00	3.64
2	2483.65	40.43	-6.09	34.34	74.00	-39.66
3	2489.35	43.93	-6.09	37.84	74.00	-36.16

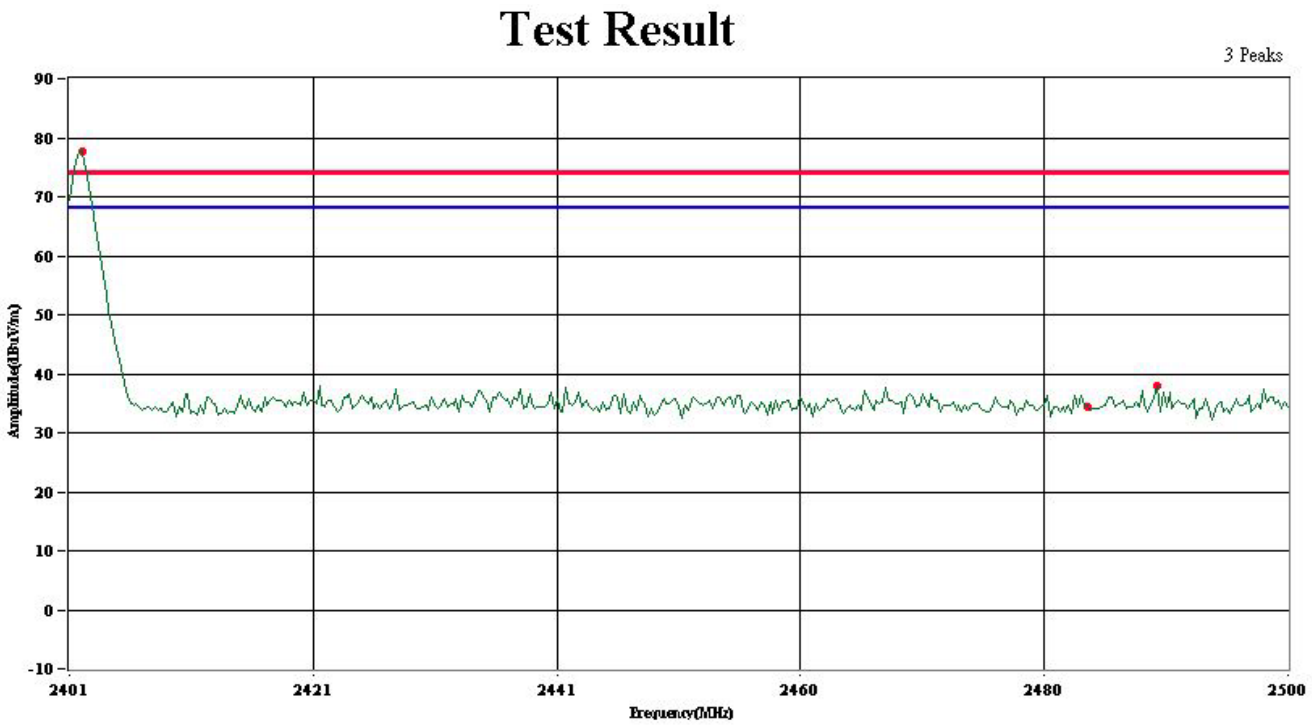
Average

No.	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Limit [dB(uV/m)]	Margin [dB]
1	2401.89	83.37	-6.04	77.33	54.00	23.33
2	2483.65	34.34	-6.09	28.25	54.00	-25.75

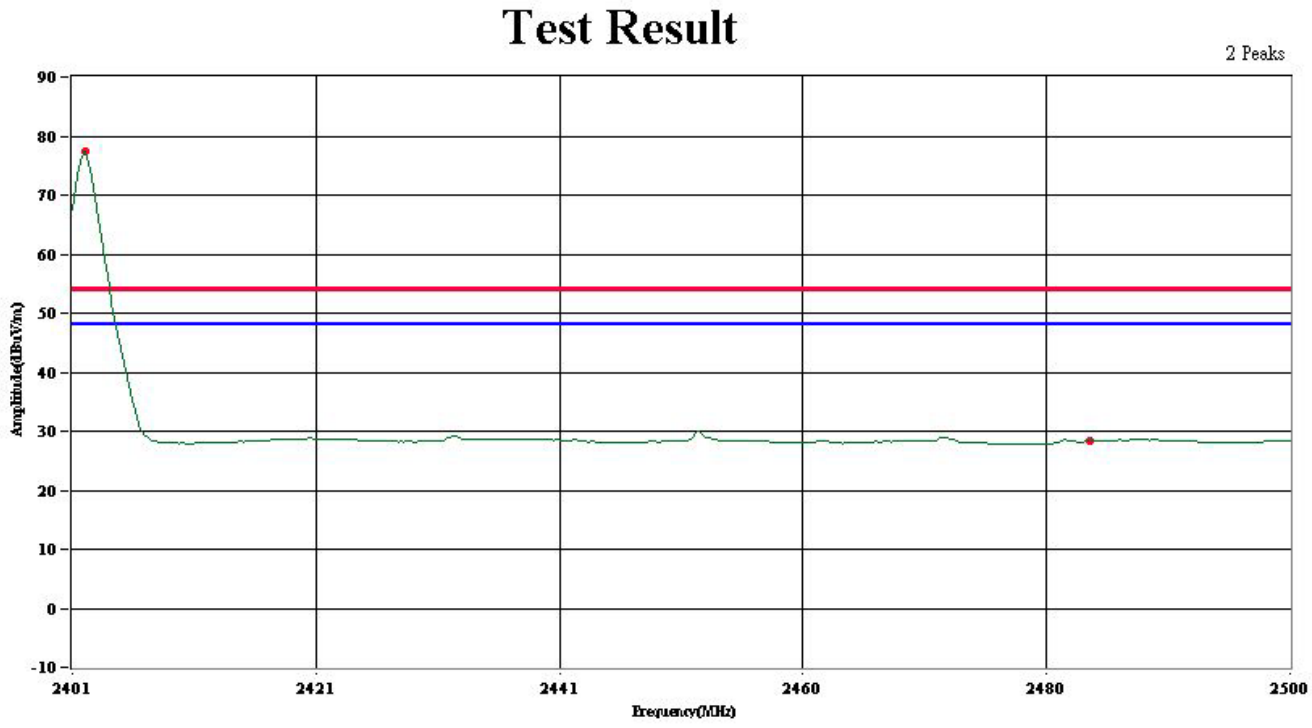
Remark

1. All Readings below 1GHz are Quasi-Peak and above 1GHz are peak or average.
2. Spectrum Analizyer Setting(Peak Detector): RBW=1MHz, VBW=1MHZ, Span=100MHz.
3. Spectrum Analizyer Setting(AVG Detector): RBW=1MHz, VBW=30HZ, Span=20MHz.
4. Emission Level= Reading + Correction Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
5. Correction Factor= Antenna Factor + Cable Loss – Amplifier Factor
6. Margin Value=Emission level-Limit value.
7. The average measurement was not performed when the peak measured data under the limit of average detection. If the average value is measured, peak measurement should also be supplied.

Vertical / Peak



Vertical / Average



5. PHOTOGRAPHS FOR TEST

5.1 TEST PHOTOGRAPHS FOR RADIATION

30-1000MHz

Above 1GHz

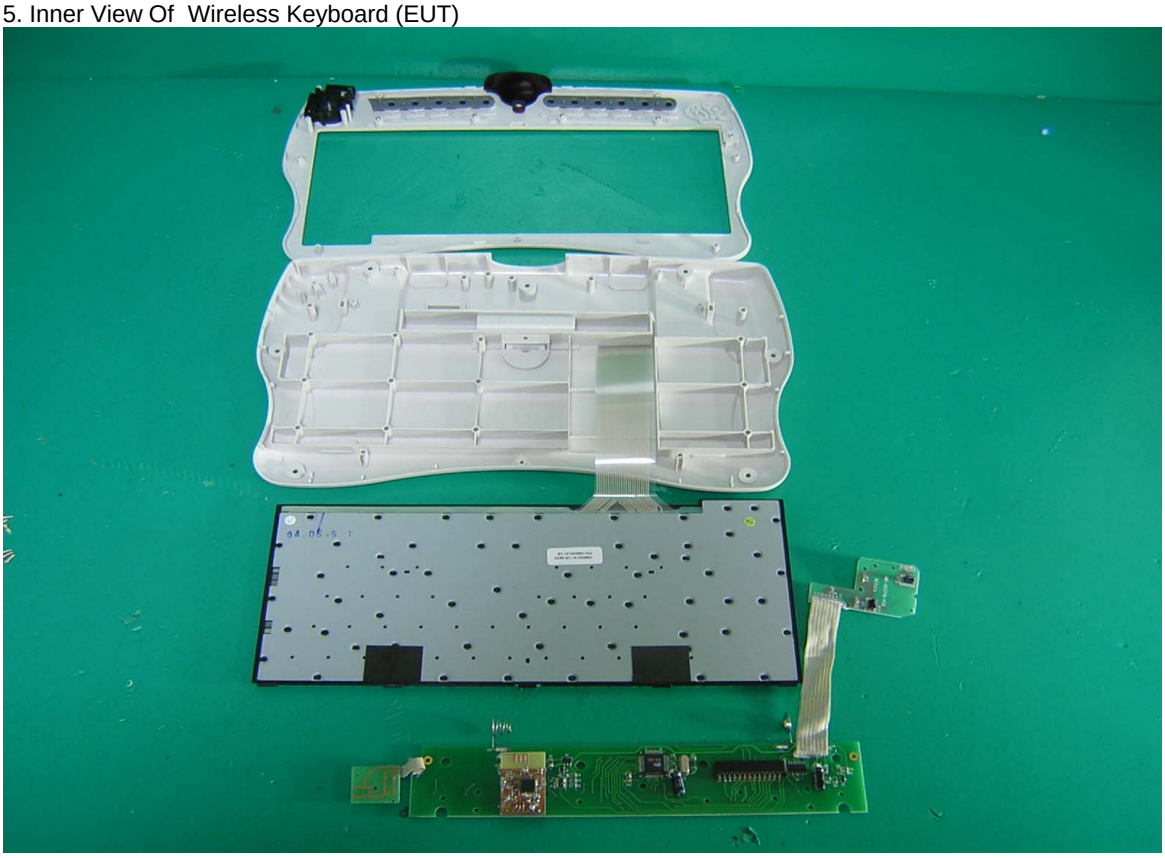
6. PHOTOGRAPHS FOR PRODUCT

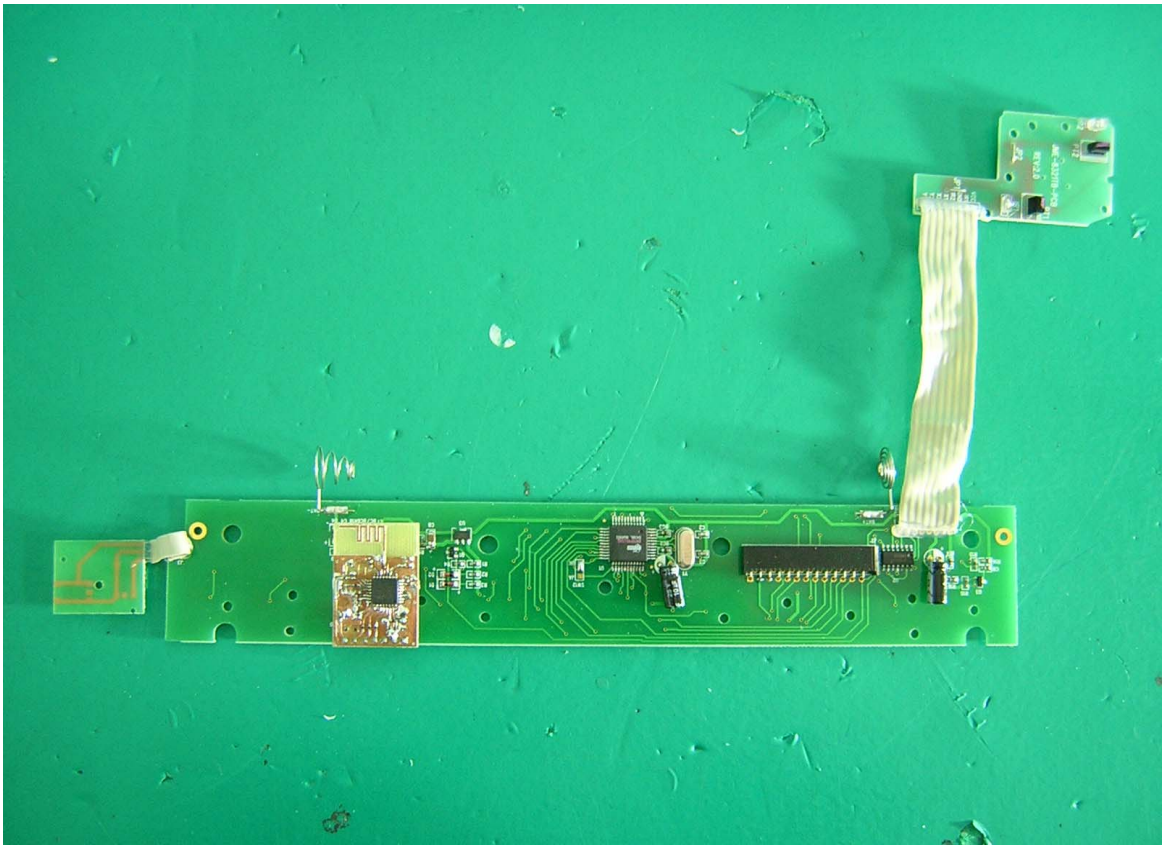
1. Front View Of Wireless Keyboard (EUT)
2. Back View Of Wireless Keyboard (EUT)

3. LABEL HERE

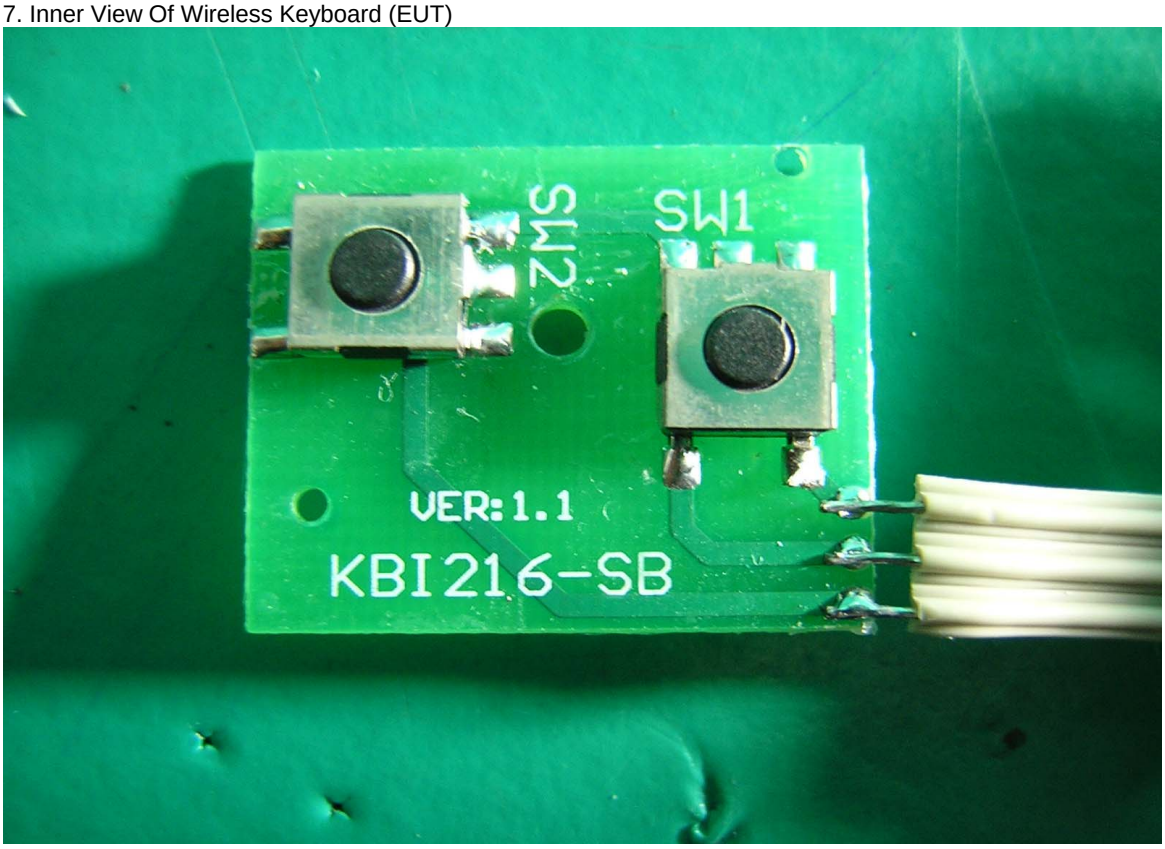

LABEL HERE
Model No: RK0410
Tested To Comply With FCC Standards
SERIAL NO:
The first use, press "connect" button of the receiver, then click button.
This divice complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference,
and (2) This device must accept any interference reveiced
,including interence that may cause undesired operation.

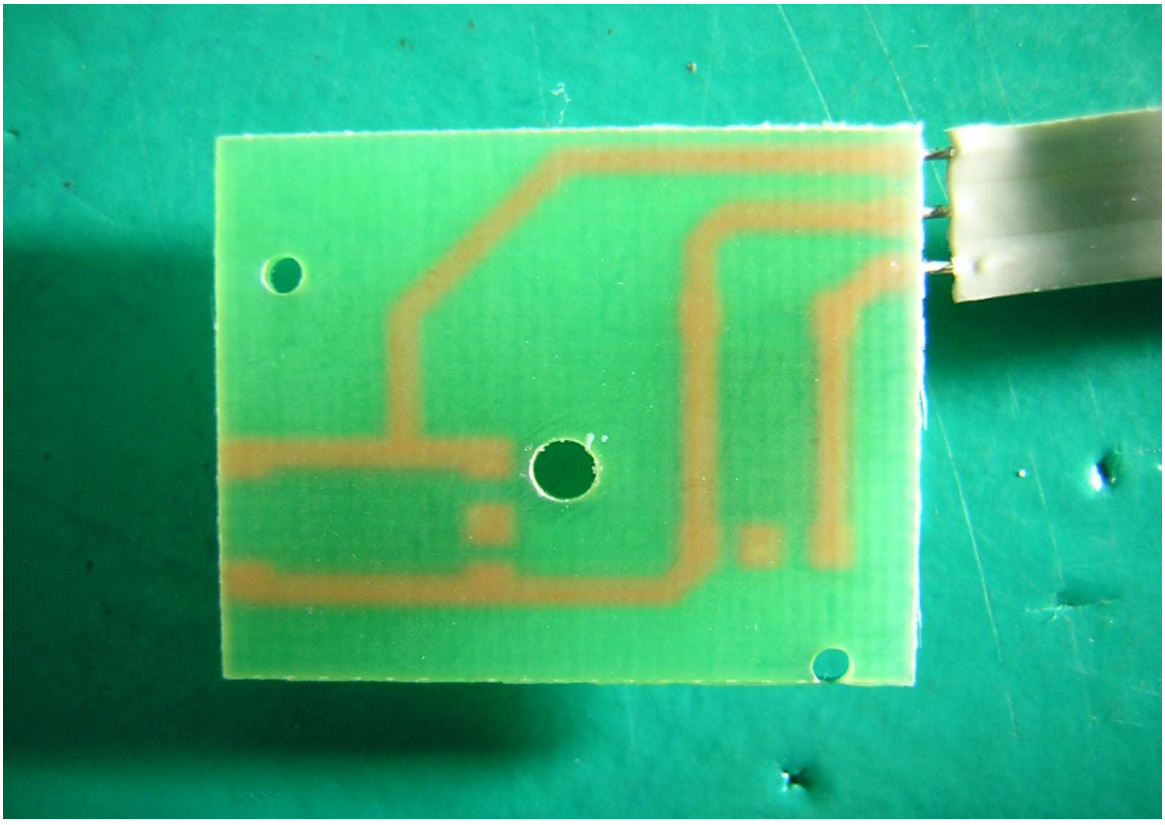
4. Inner View Of Wireless Keyboard (EUT)
5. Inner View Of Wireless Keyboard (EUT)



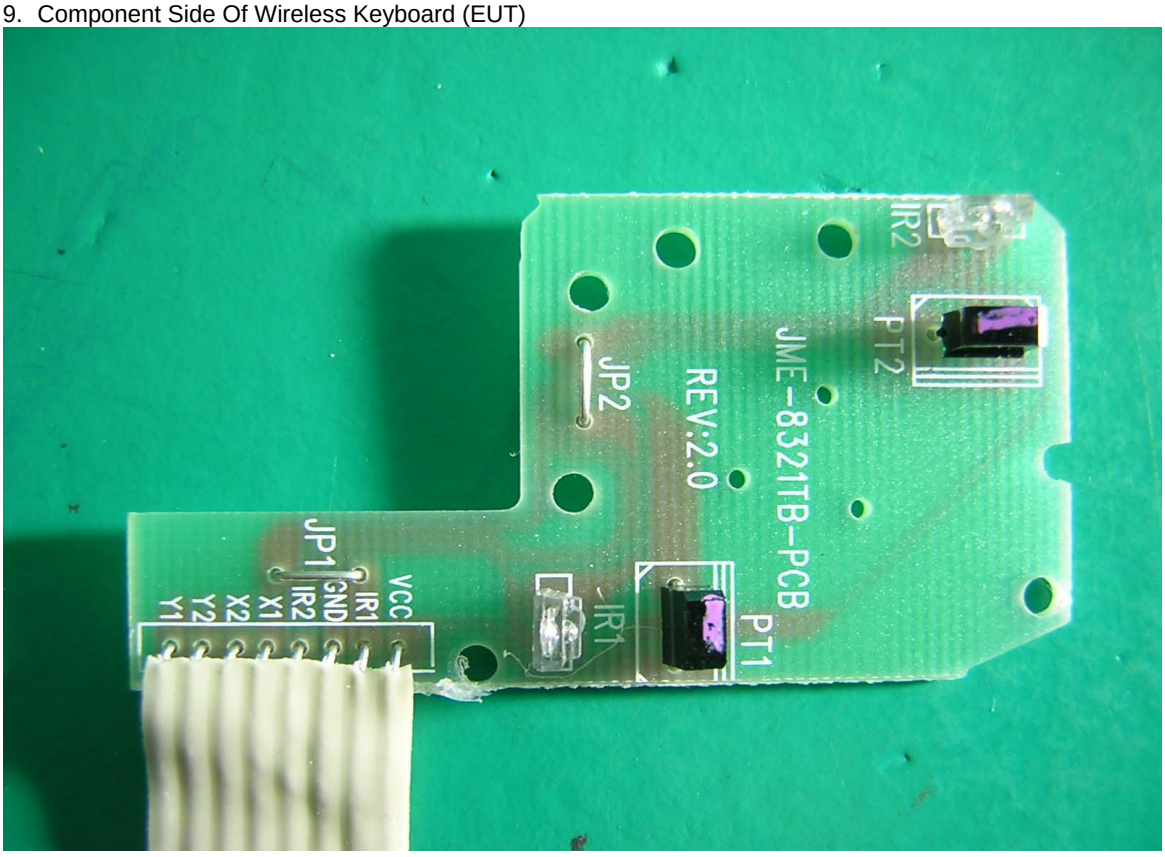


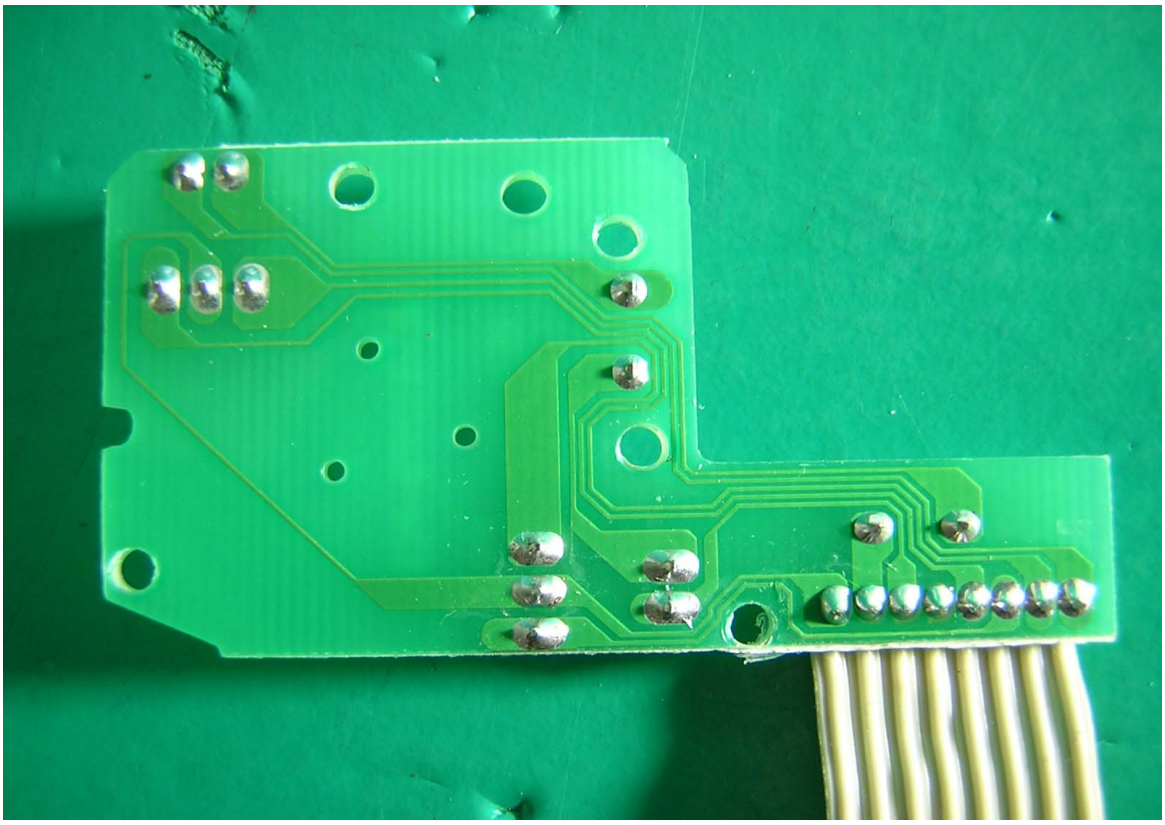
6. Inner View Of Wireless Keyboard (EUT)
7. Inner View Of Wireless Keyboard (EUT)



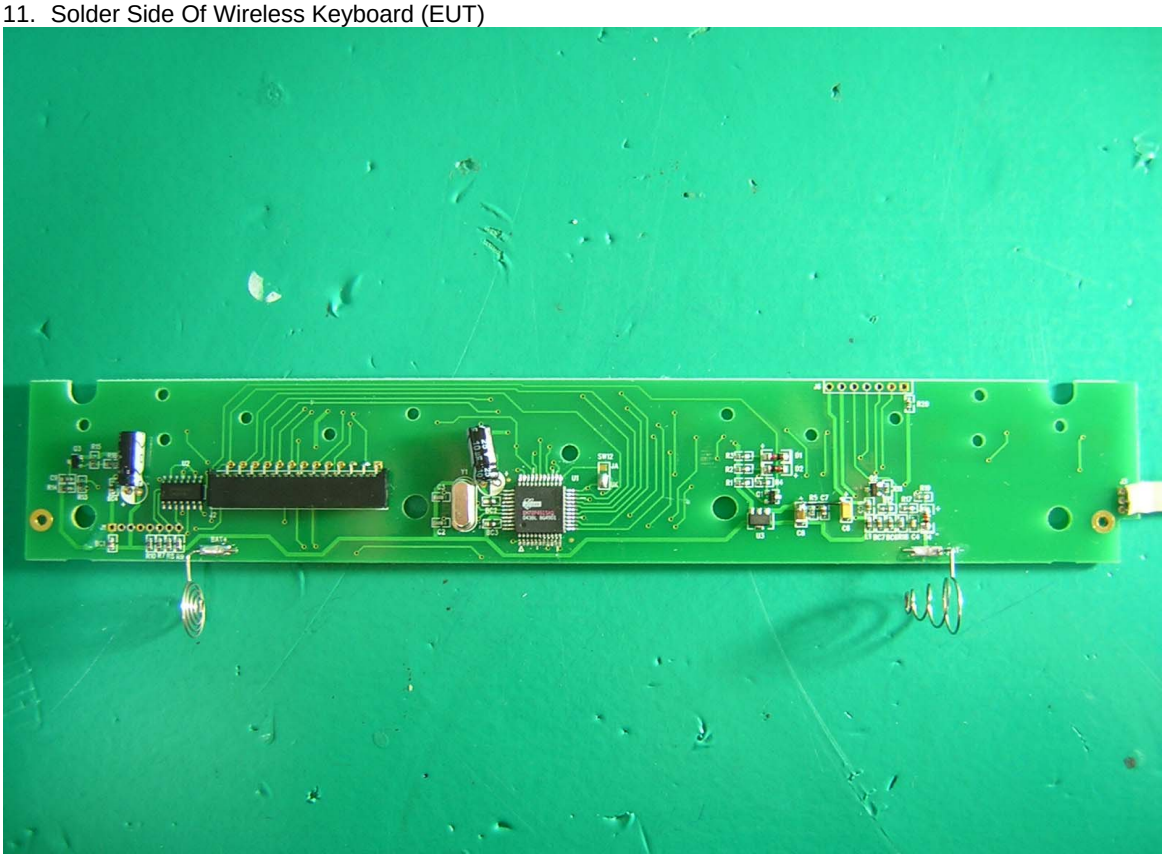


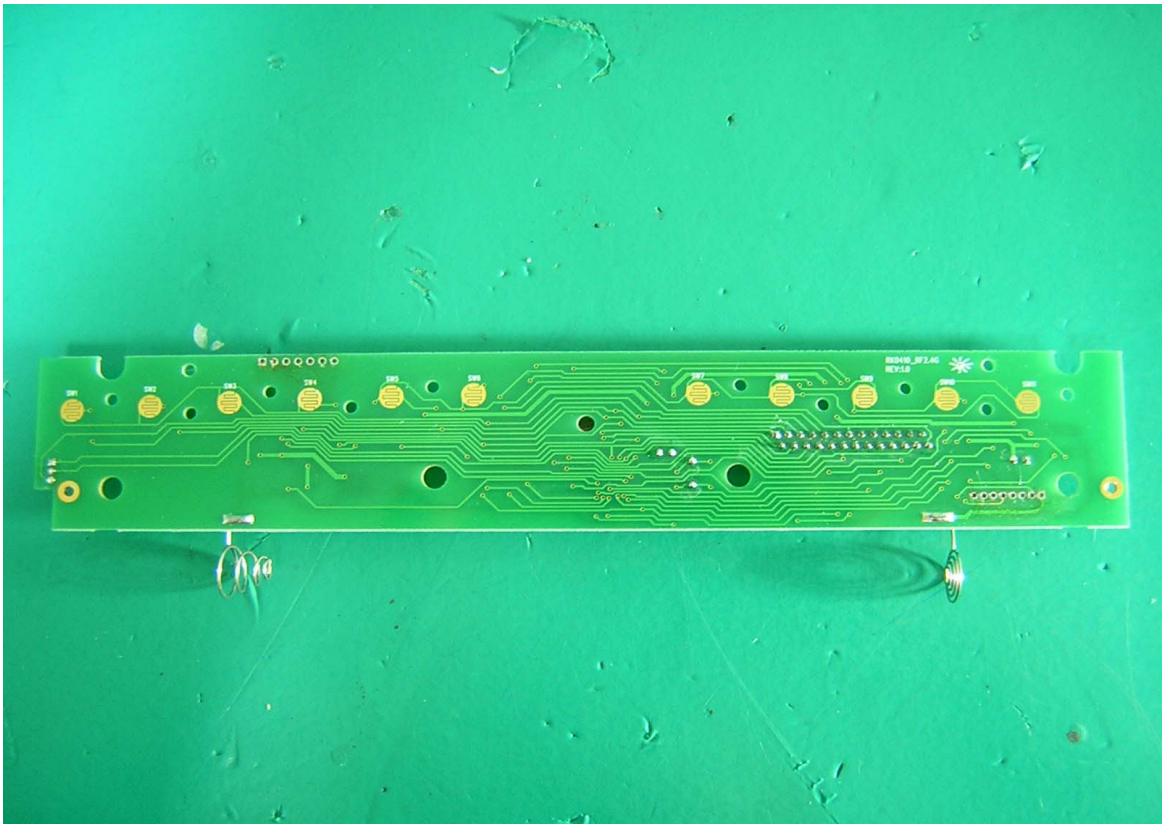
8. Component Side Of Wireless Keyboard (EUT)
9. Component Side Of Wireless Keyboard (EUT)



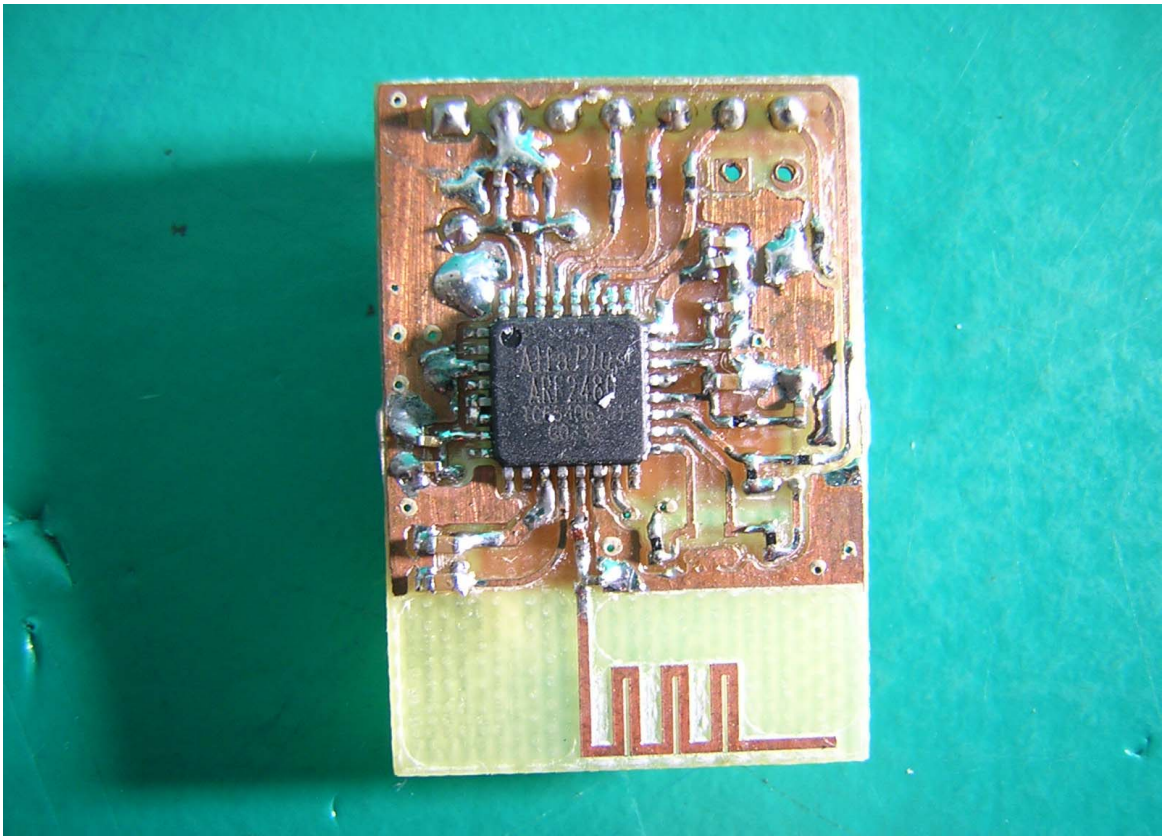


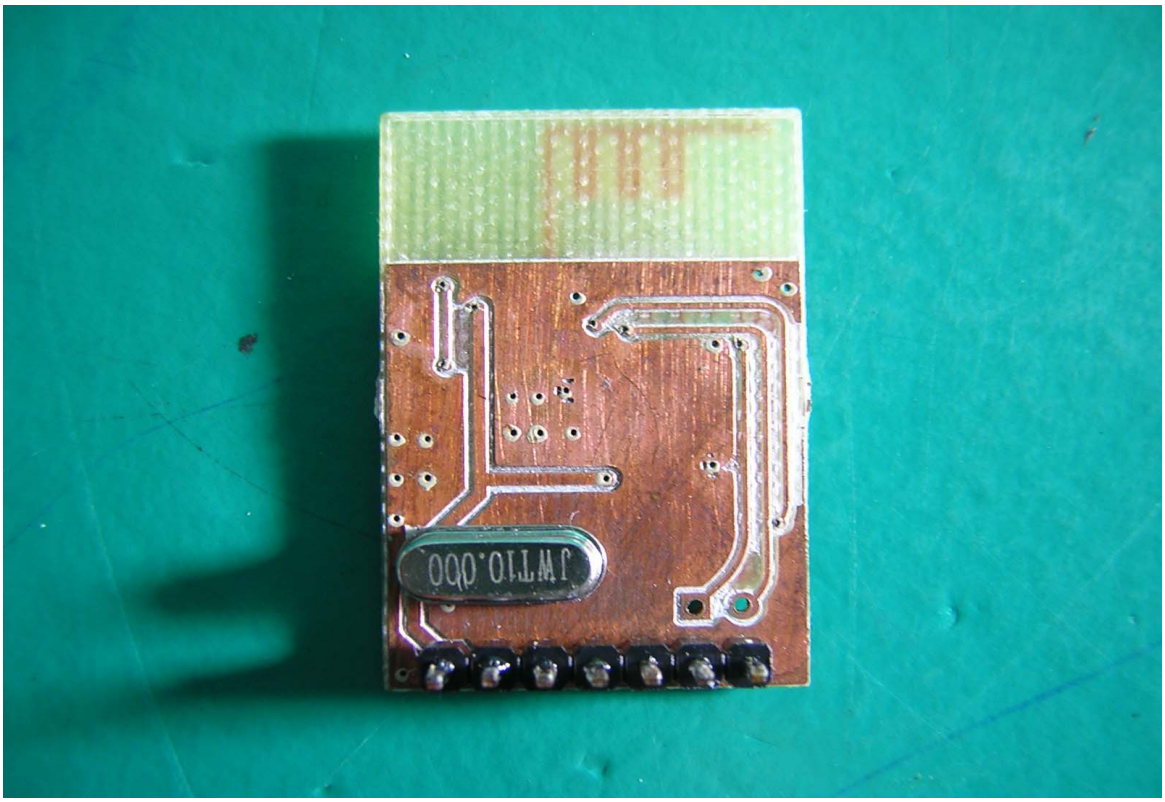
10. Component Side Of Wireless Keyboard (EUT)
11. Solder Side Of Wireless Keyboard (EUT)





12. Component Side Of RF Main Board
13. Solder Side Of RF Main Board





7. EMI REDUCTION METHOD DURING COMPLIANCE TESTING

No modification was made during testing.

Appendix A

Circuit (Block) Diagram

(Shall be added by Applicant)

Appendix B

User Manual

(Shall be added by Applicant)