FCC CERTIFICATION On Behalf of ATake Digital Technology Shenzhen Co., Ltd.

Wireless Keyboard Model No.: DKB5101

FCC ID: WWLDKB5101

Prepared for : ATake Digital Technology Shenzhen Co., Ltd.

Address : 13th Building, The 4th Industry Park, Han Shui Ko, Kong

Ming Town, Shenzhen City, China

Prepared by : ACCURATE TECHNOLOGY CO. LTD

Address : F1, Bldg. A, Changyuan New Material Port, Keyuan Rd.

Science & Industry Park, Nanshan, Shenzhen, Guangdong

P.R. China

Tel: (0755) 26503290 Fax: (0755) 26503396

Report Number : ATE20112760

Date of Test : December 21-28, 2011 Date of Report : December 28, 2011

TABLE OF CONTENTS

Descr	ription	Page
Test F	Report Certification	
	-	4
	SENERAL INFORMATION	
1.1.	Description of Device (EUT)	
1.2.	Description of Test Facility	
1.3.	Measurement Uncertainty	
2. M	MEASURING DEVICE AND TEST EQUIPMENT	6
3. S	UMMARY OF TEST RESULTS	7
4. F	TUNDAMENTAL AND HARMONICS RADIATED EMISSION FOR SECT	TION 15.249(A) 8
4.1.	Block Diagram of Test Setup	8
4.2.	The Emission Limit	
4.3.	Configuration of EUT on Measurement	
4.4.	Operating Condition of EUT	
4.5.	Test Procedure	
4.6.	The Field Strength of Radiation Emission Measurement Results	
5. S	PURIOUS RADIATED EMISSION FOR SECTION 15.249(D)	14
5.1.	Block Diagram of Test Setup	
5.2.	The Emission Limit For Section 15.249(d)	
5.3.	EUT Configuration on Measurement	
5.4.	Operating Condition of EUT	
5.5.	Test Procedure	
5.6.	The Emission Measurement Result	
6. B	SAND EDGES	
6.1.	The Requirement	20
6.2.	EUT Configuration on Measurement	
6.3.	Operating Condition of EUT	
6.4.	Test Procedure	
6.5.	The Measurement Result	
7. A	NTENNA REQUIREMENT	23
7.1.	The Requirement	23

APPENDIX I (TEST CURVES) (28 pages)

7.2.

Test Report Certification

Applicant : ATake Digital Technology Shenzhen Co., Ltd.

Manufacturer : ATake Digital Technology Shenzhen Co., Ltd.

EUT Description : Wireless Keyboard

(A) MODEL NO.: DKB5101

(B) SERIAL NO.: N/A

(C) POWER SUPPLY: DC 1.5V ("AA" batteries $1 \times$)

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.249: 2008 ANSI C63.4: 2003

The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section15.249 limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY CO. LTD is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of ACCURATE TECHNOLOGY CO. LTD.

Date of Test :	December 21-28, 2011
Prepared by :	Apple Lu
	(Engineer)
Approved & Authorized Signer:	Lemb
	(Manager)

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT : Wireless Keyboard

Model Number : DKB5101

Power Supply : DC 1.5V ("AA" batteries $1 \times$)

Operate Frequency : 2402.000-2478.000MHz

Applicant : ATake Digital Technology Shenzhen Co., Ltd.

Address : 13th Building, The 4th Industry Park, Han Shui Ko, Kong

Ming Town, Shenzhen City, China

Manufacturer : ATake Digital Technology Shenzhen Co., Ltd.

Address : 13th Building, The 4th Industry Park, Han Shui Ko, Kong

Ming Town, Shenzhen City, China

Date of sample received: December 21, 2011

Date of Test : December 21-28, 2011

1.2.Description of Test Facility

EMC Lab : Accredited by TUV Rheinland Shenzhen

Listed by FCC

The Registration Number is 752051

Listed by Industry Canada

The Registration Number is 5077A-2

Accredited by China National Accreditation Committee

for Laboratories

The Certificate Registration Number is L3193

Name of Firm : ACCURATE TECHNOLOGY CO. LTD

Site Location : F1, Bldg. A, Changyuan New Material Port, Keyuan Rd.

Science & Industry Park, Nanshan, Shenzhen, Guangdong

P.R. China

1.3. Measurement Uncertainty

Conducted Emission Expanded Uncertainty = 2.23dB, k=2

Radiated emission expanded uncertainty = 3.08dB, k=2 (9kHz-30MHz)

Radiated emission expanded uncertainty = 4.42dB, k=2 (30MHz-1000MHz)

Radiated emission expanded uncertainty = 4.06dB, k=2 (Above 1GHz)

2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 15, 2012
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 15, 2012
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 15, 2012
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 15, 2012
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 15, 2012
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 15, 2012
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 15, 2012
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 15, 2012
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 15, 2012
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 15, 2012

3. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
Section 15.207	Conducted Emission	N/A
Section 15.249(a)	Fundamental and Harmonics Radiated Emission	Compliant
Section 15.249(d)	Spurious Radiated Emission	Compliant
Section 15.249(d)	Band Edge	Compliant
Section 15.203	Antenna Requirement	Compliant

Remark: "N/A" means "Not applicable".

4. FUNDAMENTAL AND HARMONICS RADIATED EMISSION FOR SECTION 15.249(A)

4.1.Block Diagram of Test Setup

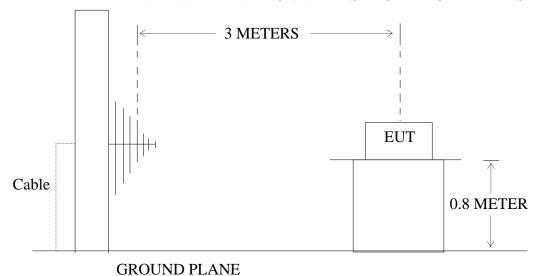
4.1.1.Block diagram of connection between the EUT and simulators

EUT

(EUT: Wireless Keyboard)

4.1.2.Semi-Anechoic Chamber Test Setup Diagram

ANTENNA ELEVATION VARIES FROM 1 TO 4 METERS



(EUT: Wireless Keyboard)

4.2. The Emission Limit

4.2.1.For intentional radiators, According to section 15.249(a), Operation within the frequency band of 2.4 to 2.4835GHz, The fundamental field strength shall not exceed 94 dB μ V/m and the harmonics shall not exceed 54 dB μ V/m.

Fundamental	Field Strength of Fundamental	Field Strength of harmonics
Frequency	(millivolts/meter)	(microvolts/meter)
902-928MHz	50	500
2400-2483.5MHz	50	500
5725-5875MHz	50	500
24.0-24.25GHz	250	2500

4.2.2.According to section 15.249(e), as shown in section 15.35(b), the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

4.3. Configuration of EUT on Measurement

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

4.3.1. Wireless Keyboard (EUT)

Model Number : DKB5101 Serial Number : N/A

Manufacturer : ATake Digital Technology Shenzhen Co., Ltd.

4.4. Operating Condition of EUT

- 4.4.1. Setup the EUT and simulator as shown as Section 4.1.
- 4.4.2. Turn on the power of all equipment.
- 4.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2402.000 2478.000 MHz MHz. We are select 2402.000MHz, 2442.000MHz, 2478.000MHz TX frequency to transmit.

4.5.Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bi-log antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver is set at 120kHz in 30-1000MHz, and set at 1MHz in above 1000MHz.

The frequency range from 30MHz to 25000MHz is checked.

4.6. The Field Strength of Radiation Emission Measurement Results **PASS.**

Date of Test:	December 24, 2011	Temperature:	25°C
EUT:	Wireless Keyboard	Humidity:	50%
Model No.:	DKB5101	Power Supply:	DC 1.5V
Test Mode:	TX 2402.000MHz	Test Engineer:	Pei

Fundamental Radiated Emissions

Frequency	Reading(dBμV/m)	Factor(dB)	Result(c	lBμV/m)	Limit(d)	BμV/m)	Marg	in(dB)	Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2402.000	96.17	110.82	-7.45	88.72	103.37	94	114	-5.28	-10.63	Vertical
2402.000	95.21	110.90	-7.45	87.76	103.45	94	114	-6.24	-10.55	Horizontal

Harmonics Radiated Emissions

Frequency	Reading(dBμV/m)	Factor(dB)	Result(c	lBμV/m)	Limit(d)	BμV/m)	Marg	in(dB)	Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
7206.000	43.57	47.52	2.97	46.54	50.49	54	74	-7.46	-23.51	Vertical
4804.000	39.48	43.70	-0.30	39.18	43.40	54	74	-14.82	-30.60	Horizontal

Note:

- 1. Emissions attenuated more than 20 dB below the permissible value are not reported.
- 2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Amplifier Gain

Date of Test:	December 24, 2011	Temperature:	25°C
EUT:	Wireless Keyboard	Humidity:	50%
Model No.:	DKB5101	Power Supply:	DC 1.5V
Test Mode:	TX 2442.000MHz	Test Engineer:	Pei

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m	Factor(dB) Corr.	Result(d	BμV/m)	Limit(dl	BμV/m)	Margi	in(dB)	Polarization
	AV	PEAK	Con.	AV	PEAK	AV	PEAK	AV	PEAK	
2442.000	94.63	110.80	-7.35	87.28	103.45	94	114	-6.72	-10.55	Vertical
2442.000	94.12	111.02	-7.35	89.77	103.67	94	114	-4.23	-10.33	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m	Factor(dB) Corr.	Result(d	BμV/m)	Limit(dl	BμV/m)	Margi	n(dB)	Polarization
(WITIZ)	AV	PEAK	Con.	AV	PEAK	AV	PEAK	AV	PEAK	
4884.000	45.21	49.32	0.15	45.36	49.47	54	74	-8.64	-24.53	Vertical
4884.000	39.37	43.49	0.15	39.52	43.64	54	74	-14.48	-30.36	Horizontal

Note:

- 1. Emissions attenuated more than 20 dB below the permissible value are not reported.
- 2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

 $Result = Reading + Corrected \ Factor$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Amplifier Gain

Date of Test:	December 24, 2011	Temperature:	25°C
EUT:	Wireless Keyboard	Humidity:	50%
Model No.:	DKB5101	Power Supply:	DC 1.5V
Test Mode:	TX 2478.000MHz	Test Engineer:	Pei

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m	Factor(dB) Corr.	Result(d	BμV/m)	Limit(dl	BμV/m)	Marg	in(dB)	Polarization
(WILL)	AV	PEAK	Con.	AV	PEAK	AV	PEAK	AV	PEAK	
2478.000	94.86	111.22	-7.37	87.94	103.85	94	114	-6.51	-10.15	Vertical
2478.000	95.33	111.21	-7.37	87.96	103.84	94	114	-6.04	-10.16	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m	Factor(dB) Corr.	Result(d	BμV/m)	Limit(d)	BμV/m)	Marg	in(dB)	Polarization
(WITIZ)	AV	PEAK	Con.	AV	PEAK	AV	PEAK	AV	PEAK	
4956.000	42.21	46.97	0.51	42.72	47.48	54	74	-11.28	-26.52	Vertical
4956.000	41.38	46.52	0.51	41.89	47.03	54	74	-12.11	-26.97	Horizontal

Note:

- 1. Emissions attenuated more than 20 dB below the permissible value are not reported.
- 2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Amplifier Gain

5. SPURIOUS RADIATED EMISSION FOR SECTION 15.249(D)

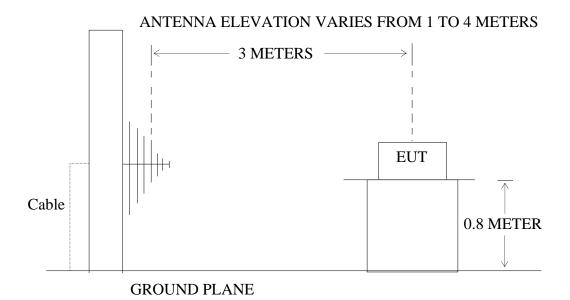
5.1.Block Diagram of Test Setup

5.1.1.Block diagram of connection between the EUT and simulators

EUT

(EUT: Wireless Keyboard)

5.1.2.Semi-Anechoic Chamber Test Setup Diagram



(EUT: Wireless Keyboard)

5.2. The Emission Limit For Section 15.249(d)

5.2.1.Emission radiated outside of the specified frequency bands, except for harmonics, shall be comply with the general radiated emission limits in Section 15.209.

Radiation Emission Measurement Limits According to Section 15.209

1			
		Limit	
Frequency (MHz)	Field Strength of Quasi-peak Value (microvolts/m)	Field Strength of Quasi-peak Value (dBµV/m)	The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is
30 - 88	100	40	performed with Average detector.
88 - 216	150	43.5	Except those frequency bands mention above, the
216 - 960	200	46	final measurement for frequencies below
Above 960	500	54	1000MHz is performed with Quasi Peak detector.

5.3.EUT Configuration on Measurement

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

5.3.1. Wireless Keyboard (EUT)

Model Number : DKB5101

Serial Number : N/A

Manufacturer : ATake Digital Technology Shenzhen Co., Ltd.

5.4. Operating Condition of EUT

- 5.4.1. Setup the EUT and simulator as shown as Section 5.1.
- 5.4.2. Turn on the power of all equipment.
- 5.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2402.000 2478.000 MHz MHz. We are select 2402.000MHz, 2442.000MHz, 2478.000MHz TX frequency to transmit.

5.5.Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver is set at 120kHz in 30-1000MHz, and set at 1MHz in above 1000MHz.

The frequency range from 30MHz to 25000MHz is checked.

The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.

5.6. The Emission Measurement Result

PASS.

Date of Test:	December 24, 2011	Temperature:	25°C
EUT:	Wireless Keyboard	Humidity:	50%
Model No.:	DKB5101	Power Supply:	DC 1.5V
Test Mode:	TX 2402.000MHz	Test Engineer:	Pei

Frequency	Reading	Factor(dB)	Result	Limit	Margin	Polarization
(MHz)	(dBµV/m)	Corr.	(dBµV/m)	(dBµV/m)	(dB)	
	QP		QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

Note:

- 1. Emissions attenuated more than 20 dB below the permissible value are not reported.
- 2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Amplifier Gain

Date of Test:	December 24, 2011	Temperature:	25°C
EUT:	Wireless Keyboard	Humidity:	50%
Model No.:	DKB5101	Power Supply:	DC 1.5V
Test Mode:	TX 2442.000MHz	Test Engineer:	Pei

Frequency	Reading	Factor(dB)	Result	Limit	Margin	Polarization
(MHz)	(dBµV/m)	Corr.	(dBµV/m)	(dBµV/m)	(dB)	
	QP		QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

Note:

- 1. Emissions attenuated more than 20 dB below the permissible value are not reported.
- 2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Amplifier Gain

Date of Test:	December 24, 2011	Temperature:	25°C
EUT:	Wireless Keyboard	Humidity:	50%
Model No.:	DKB5101	Power Supply:	DC 1.5V
Test Mode:	TX 2478.000MHz	Test Engineer:	Pei

Frequency	Reading	Factor(dB)	Result	Limit	Margin	Polarization
(MHz)	(dBµV/m)	Corr.	(dBµV/m)	(dBµV/m)	(dB)	
	QP		QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

Note:

- 1. Emissions attenuated more than 20 dB below the permissible value are not reported.
- 2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Amplifier Gain

6. BAND EDGES

6.1.The Requirement

6.1.1.Band Edge from 2400MHz to 2483.5MHz. Emission radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

6.2.EUT Configuration on Measurement

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

6.2.1. Wireless Keyboard (EUT)

Model Number : DKB5101

Serial Number : N/A

Manufacturer : ATake Digital Technology Shenzhen Co., Ltd.

6.3. Operating Condition of EUT

- 6.3.1. Setup the EUT and simulator as shown as Section 4.1.
- 6.3.2. Turn on the power of all equipment.
- 6.3.3. Let the EUT work in TX modes measure it. The transmit frequency are 2402.000-2478.000MHz MHz. We are select 2402.000MHz, 2478.000MHz TX frequency to transmit.

6.4. Test Procedure

- 1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
- 2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
- 4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

RBW=1MHz, VBW=1MHz

6.5. The Measurement Result

Pass.

Date of Test:	December 24, 2011	Temperature:	25°C
EUT:	Wireless Keyboard	Humidity:	50%
Model No.:	DKB5101	Power Supply:	DC 1.5V
Test Mode:	TX 2402.000MHz	Test Engineer:	Pei

Frequency	Reading(c	dBμV/m)	Factor(dB)	Result(c	lBμV/m)	Limit(dI	BμV/m)	Margi	in(dB)	Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
-	_	_	-	-	_	_	_	_	_	Vertical
-	-	_	-	-	-	-	-	-	-	Horizontal

Note:

- 1. Emissions attenuated more than 20 dB below the permissible value are not reported.
- 2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Amplifier Gain

Date of Test:	December 24, 2011	Temperature:	25°C
EUT:	Wireless Keyboard	Humidity:	50%
Model No.:	DKB5101	Power Supply:	DC 1.5V
Test Mode:	TX 2478.000MHz	Test Engineer:	Pei

Frequency	Reading(dBµV/m)		Factor(dB)	Result(dBµV/m)		Limit(dBµV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
-	_	-	-	-	-	-	-	-	-	Vertical
-	_	_	-	-	-	-	-	_	_	Horizontal

Note:

- 1. Emissions attenuated more than 20 dB below the permissible value are not reported.
- 2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

 $Result = Reading + Corrected \ Factor$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Amplifier Gain

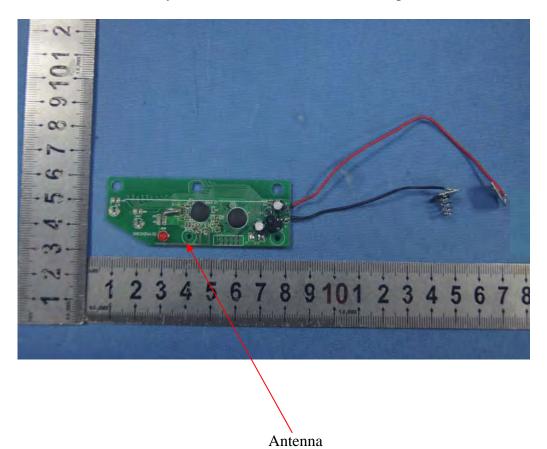
7. ANTENNA REQUIREMENT

7.1.The Requirement

7.1.1.According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

7.2. Antenna Construction

The antenna is PCB Layout antenna, no consideration of replacement.



APPENDIX I (Test Curves)



F1.Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Wireless keyboard

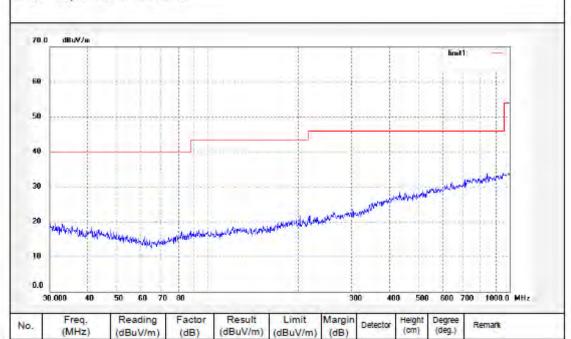
Mode: TX 2402 Model: DKB5101

Manufacturer: ATake Digital

Note: Report NO.: ATE20112760

Polarization: Horizontal Power Source: DC 1.5V

Date: 11/12/23/ Time: 8/55/36 Engineer Signature: Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Bob #807

Standard: FCC Class B 3M Radiated

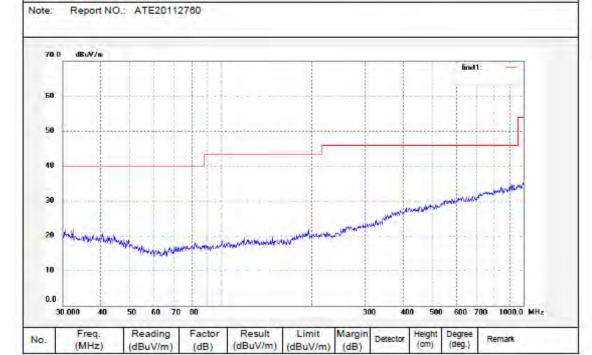
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Wireless keyboard

Mode: TX 2402 Model: DKB5101

Manufacturer: ATake Digital

Polarization: Vertical Power Source: DC 1.5V

Date: 11/12/23/ Time: 8/57/19 Engineer Signature; Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Bob #851 Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.(C)/Hum.(%) 24 C / 48 % EUT: Wireless keyboard

Mode: TX 2402 Model: DKB5101

Manufacturer: ATake Digital

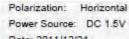
2402.000

95.21

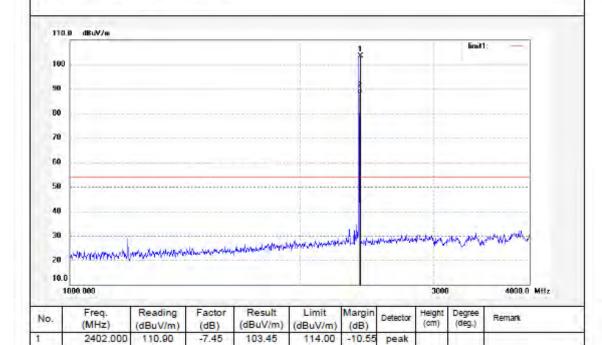
-7.45

87,76

Note: Report NO.: ATE20112760



Date: 2011/12/24 Time: 13:41:40 Engineer Signature: Distance: 3m



94.00

-6.24

AVG



F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P,R,China

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Site: 966 chamber Tel:+86-0755-26503290

Job No.: Bob #850

Standard: FCC Class B 3M Radiated

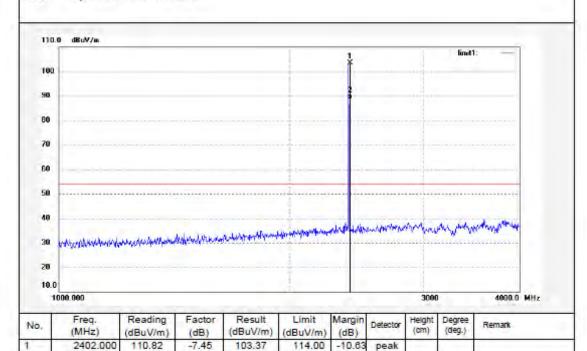
Test item: Radiation Test Temp.(C)/Hum.(%) 24 C / 48 % EUT: Wireless keyboard

Mode: TX 2402 Model: DKB5101 Manufacturer: ATake Digital

Polarization: Vertical Power Source: DC 1.5V

Date: 2011/12/24 Time: 13:38:05 Engineer Signature: Distance: 3m

Note: Report NO.: ATE20112760



94.00

-5,28

AVG

2

2402.000

96.17

-7.45

88.72



F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Site: 966 chamber Tel:+86-0755-26503290

Standard: FCC Class B 3M Radiated

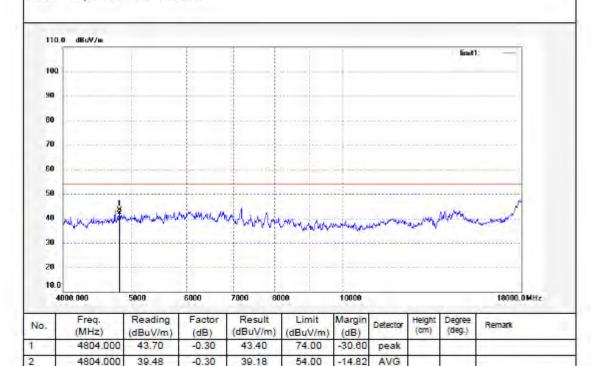
Test item: Radiation Test Temp.(C)/Hum.(%) 24 C / 48 % EUT: Wireless keyboard

Mode: TX 2402 Model: DKB5101 Manufacturer: ATake Digital

Polarization: Horizontal Power Source: DC 1.5V

Date: 2011/12/24 Time: 16:37:33 Engineer Signature: Distance: 3m

Report NO.: ATE20112760 Note:





F1,Bldg.A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Bob #857

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: Wireless keyboard

7206.000

2

43.57

2.97

46.54

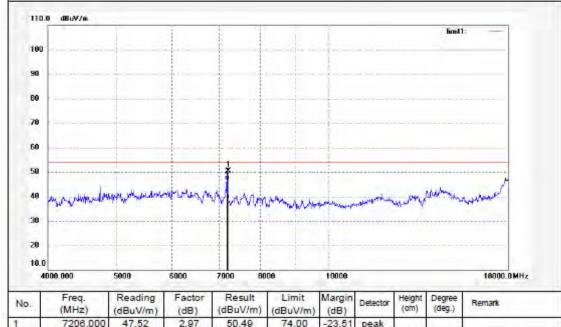
Model: TX 2402 Model: DKB5101 Manufacturer: ATake Digital

Note: Report NO.: ATE20112760

Polarization: Vertical Power Source: DC 1.5V

Date: 2011/12/24 Time: 16:39:23 Engineer Signature: Distance: 3m

te: Report NO.: ATE20112760



54.00

-7.48

AVG



F1,Bldg,A,Changyuan New Material Port Keyuan Rd,

Site: 966 chamber Tel:+86-0755-26503290

Fax:+86-0755-26503396 Science & Industry Park, Nanshan Shenzhen, P.R. China Job No.: Bob #901 Polarization: Horizontal Standard: FCC Class B 3M Radiated Power Source: DC1.5V Test item: Radiation Test Date: 2011/12/26 Temp.(C)/Hum.(%) 25 C / 50 % Time: 11:52:09 EUT: Wireless keyboard Engineer Signature: Bob Distance: 3m Mode: TX 2402 Model: DKB5101 Manufacturer: ATake Digital Note: Report No.:ATE20112760 70.0 dBuV/m 68 ويراه والمعارض والمراب والمعارض والمعار 48 30 28 0.0 18000.000 20000 25000.0MHz Reading Margin Freq. Factor Result Limit Height (cm) Degree (deg.)

(dBuV/m)

(dBuV/m)

Detector

(dB)

No.

(MHz)

(dBuV/m)

(dB)

Remark



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Bob #902 Standard: FCC Class B 3M Radiated Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 % EUT: Wireless keyboard

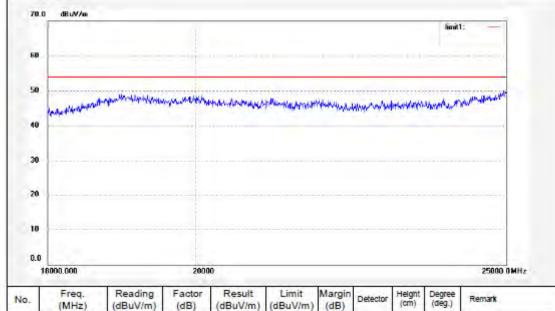
Model: TX 2402 Model: DKB5101 Manufacturer: ATake Digital Polarization: Vertical Power Source: DC1.5V Date: 2011/12/26

Engineer Signature: Bob

Distance: 3m

Time: 11:56:43

Note: Report No.:ATE20112760





F1.Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Wireless keyboard

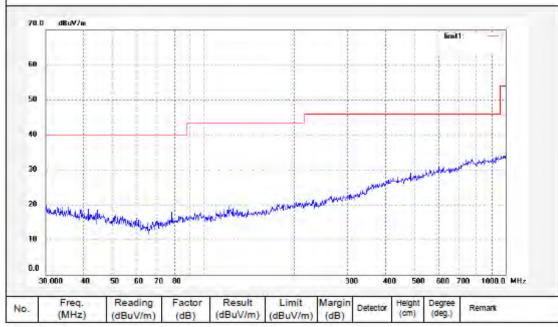
Mode: TX 2442 Model: DKB5101

Manufacturer: ATake Digital

Polarization: Horizontal Power Source: DC 1.5V

Date: 11/12/23/ Time: 8/58/13 Engineer Signature: Distance: 3m

Note: Report NO.: ATE20112780





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Bob #808 Standard: FCC Class B 3M Radiated

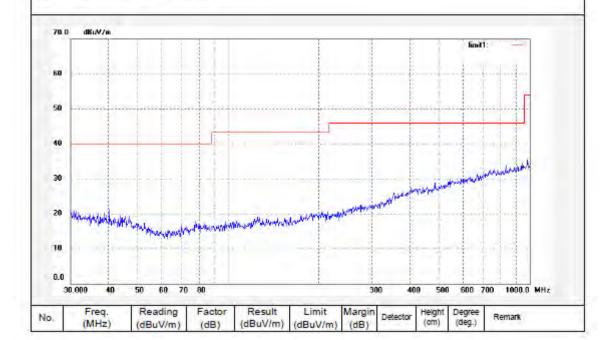
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Wireless keyboard

Model: TX 2442 Model: DKB5101 Manufacturer: ATake Digital

Note: Report NO.: ATE20112760

Polarization: Vertical Power Source: DC 1.5V

Date: 11/12/23/ Time: 8/57/38 Engineer Signature: Distance: 3m





ACCURATE TECHNOLOGY CO., LTD. Site: 968 chamber

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park.Nanshan Shenzhen,P.R.China
Fax:+86-0755-26503290
Fax:+86-0755-26503396 Science & Industry Park, Nanshan Shenzhen, P.R. China

Job No.: Bob #852

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

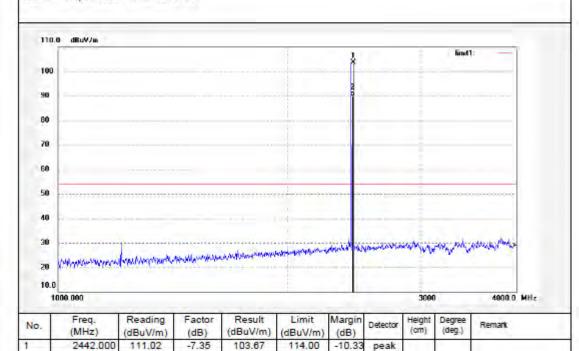
EUT: Wireless keyboard

Mode: TX 2442 Model: DKB5101 Manufacturer: ATake Digital

Note: Report NO.: ATE20112760

Polarization: Horizontal Power Source: DC 1.5V

Date: 2011/12/24 Time: 13:43:27 Engineer Signature: Distance: 3m



94.00

-4.23

AVG

2

2442.000

97.12

-7.35

89.77



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Bob #853

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: Wireless keyboard

Mode: TX 2442 Model: DKB5101

Manufacturer: ATake Digital
Note: Report NO.: ATE20112760

Polarization: Vertical Power Source: DC 1.5V

Date: 2011/12/24 Time: 13:45:09 Engineer Signature:

Distance: 3m

110.0 dBoW/m firet1: 100 80 60 50 '30 10.0 1000.000 4000.0 MHz 3000 Freq. Reading Factor Result Limit Margin Degree Height Detector Remark No. (MHz) (deg.) (dBuV/m) (cm) (dBuV/m) (dB) (dBuV/m) (dB) 2442.000 110.80 -7.35103.45 114.00 -10.55 1 peak 2 2442.000 87.28 94.00 94.63 -7.35 -6.72 AVG



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Bob #859

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: Wireless keyboard

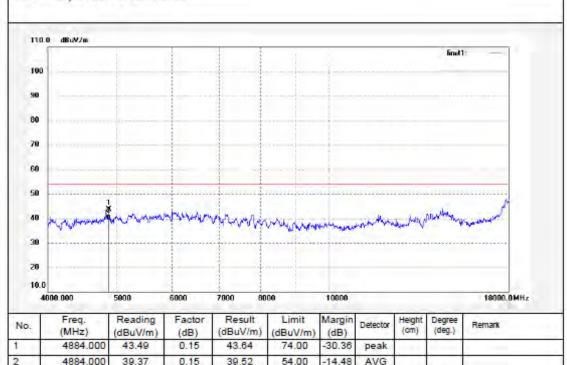
EUT: Wireless keyboard Mode: TX 2442

Model: DKB5101 Manufacturer: ATake Digital

Note: Report NO.: ATE20112760

Polarization: Horizontal Power Source: DC 1.5V Date: 2011/12/24

Time: 16:43:32
Engineer Signature:
Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Bob #858 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

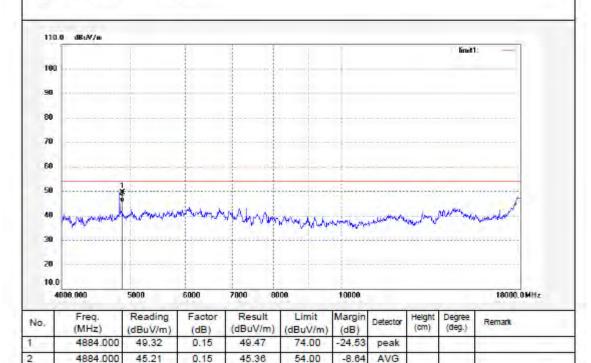
Temp.(C)/Hum.(%) 24 C / 48 % EUT: Wireless keyboard

Mode: TX 2442 Model: DKB5101 Manufacturer: ATake Digital

Polarization: Vertical Power Source: DC 1.5V

Date: 2011/12/24 Time: 16:41:40 Engineer Signature:

Distance: 3m





Reading

(dBuV/m)

Freq.

(MHz)

No.

Factor

(dB)

Result

(dBuV/m)

ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,

Site: 966 chamber Tel:+86-0755-26503290

Science & Industry Park, Nanshan Shenzhen, P.R. China Fax: +86-0755-26503396 Polarization: Horizontal Job No.: Bob #904 Standard: FCC Class B 3M Radiated Power Source: DC1.5V Test item: Radiation Test Date: 2011/12/26 Temp.(C)/Hum.(%) 25 C / 50 % Time: 12:05:30 EUT: Wireless keyboard Engineer Signature: Bob Mode: TX 2442 Distance: 3m Model: DKB5101 Manufacturer: ATake Digital Note: Report No.:ATE20112760 dBuW/m fimit1: there well broken a bear and we have the former than the former than the first of the first broken the first of the first 40 30 10 18000,000 20000 25000.0MHz

Margin

(dB)

Limit

(dBuV/m)

Height (cm)

Detector

Degree (deg.)



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

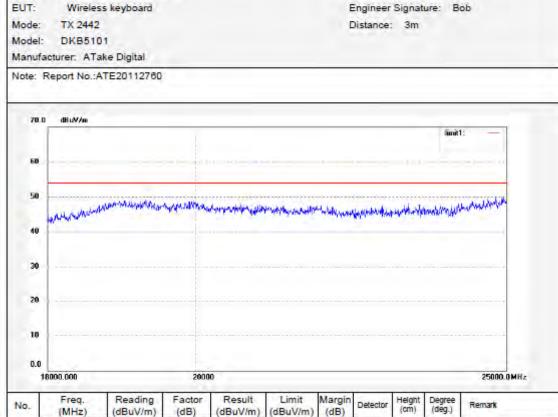
Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Standard: FCC Class B 3M Radiated Test item: Radiation Test Temp.(C)/Hum.(%) 25 C / 50 %

Wireless keyboard

Polarization: Vertical Power Source: DC1.5V Date: 2011/12/26 Time: 12:01:19

Engineer Signature: Bob





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.(C)/Hum.(%) 24 C / 48 % Wireless keyboard

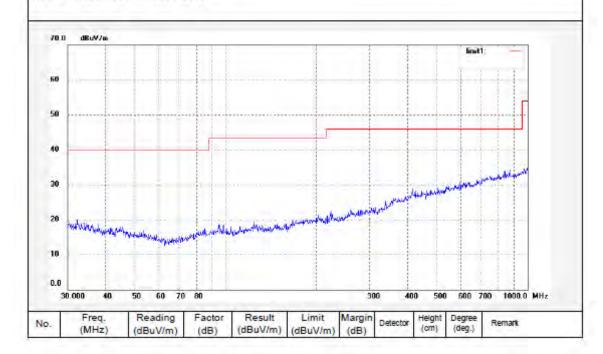
Mode: TX 2478 Model: DKB5101 Manufacturer: ATake Digital

Report NO.: ATE20112760

Power Source: DC 1.5V Date: 11/12/23/ Time: 8/58/43

Polarization: Horizontal

Engineer Signature: Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.(C)/Hum.(%) 24 C / 48 %

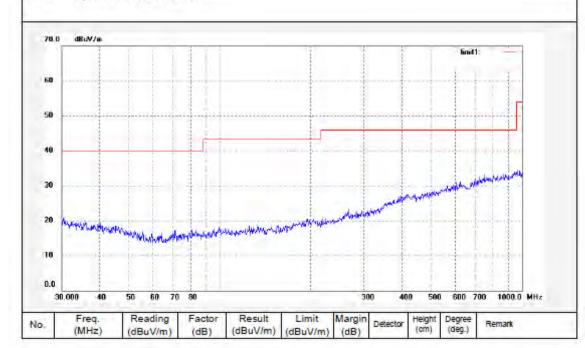
EUT: Wireless keyboard

Mode: TX 2478 Model: DKB5101 Manufacturer: ATake Digital

Note: Report NO.: ATE20112760

Polarization: Vertical Power Source: DC 1.5V

Date: 11/12/23/ Time: 8/59/12 Engineer Signature: Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 986 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Bob #855 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 % EUT: Wireless keyboard

Model: TX 2478

Model: DKB5101

Manufacturer: ATake Digital

2478.000

95.33

2

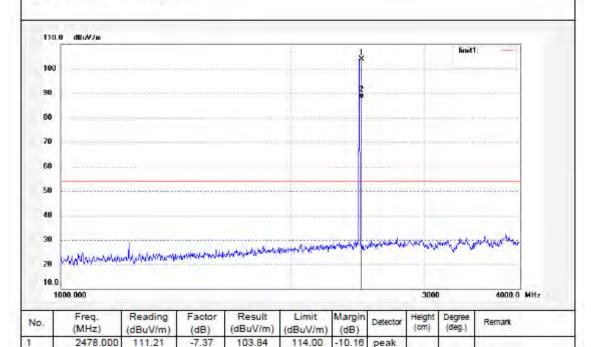
-7.37

87.96

Note: Report NO.: ATE20112760

Polarization: Horizontal Power Source: DC 1.5V

Date: 2011/12/24 Time: 13:48:59 Engineer Signature: Distance: 3m



94.00

-6.04

AVG



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Wireless keyboard

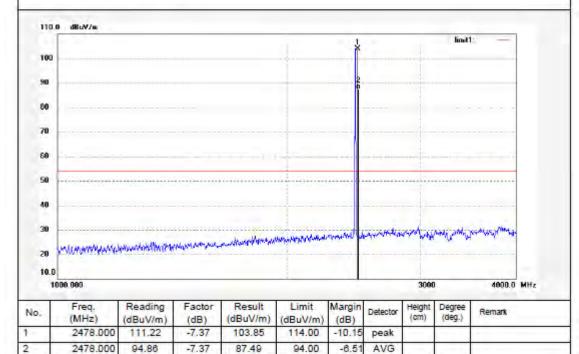
Mode: TX 2478 Model: DKB5101

Manufacturer: ATake Digital

Power Source: DC 1.5V Date: 2011/12/24

Time: 13:47:01 Engineer Signature: Distance: 3m

Polarization: Vertical





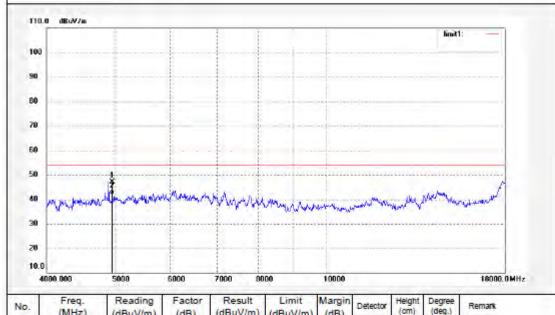
F1,Bldg.A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Bob #860 Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: Wireless keyboard

Model: TX 2478 Model: DKB5101 Manufacturer: ATake Digital Polarization: Horizontal Power Source: DC 1.5V

Date: 2011/12/24 Time: 18:45:00 Engineer Signature: Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	(dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	4956.000	46.52	0.51	47.03	74.00	-26.97	peak				
2	4956.000	41.38	0.51	41.89	54.00	-12.11	AVG				



F1,Bldg.A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Bob #861

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

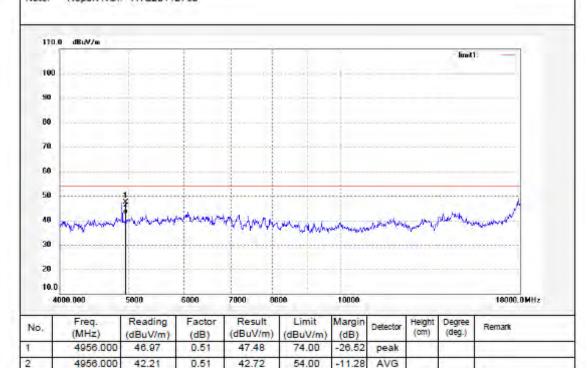
EUT: Wireless keyboard

Model: TX 2478 Model: DKB5101 Manufacturer: ATake Digital

Note: Report NO.: ATE20112760

Polarization: Vertical Power Source: DC 1.5V

Date: 2011/12/24 Time: 16:46:38 Engineer Signature: Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Bob #905 Standard: FCC Class B 3M Radiated Test item: Radiation Test Temp.(C)/Hum.(%) 25 C / 50 %

EUT: Wireless keyboard

Mode: TX 2478 Model: DKB5101

(MHz)

(dBuV/m)

(dB)

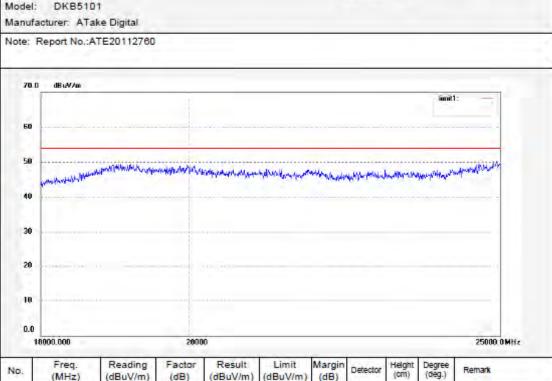
(dBuV/m)

Polarization: Horizontal Power Source: DC1.5V

Date: 2011/12/26 Time: 12:10:41

Engineer Signature: Bob

Distance: 3m



(dBuV/m)

(dB)



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Bob #906 Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Wireless keyboard

Mode: TX 2478 Model: DKB5101

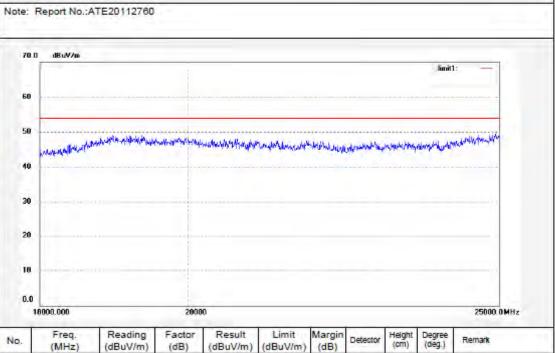
Manufacturer: ATake Digital

Polarization: Vertical Power Source: DC1,5V Date: 2011/12/26

Date: 2011/12/26 Time: 12:15:08

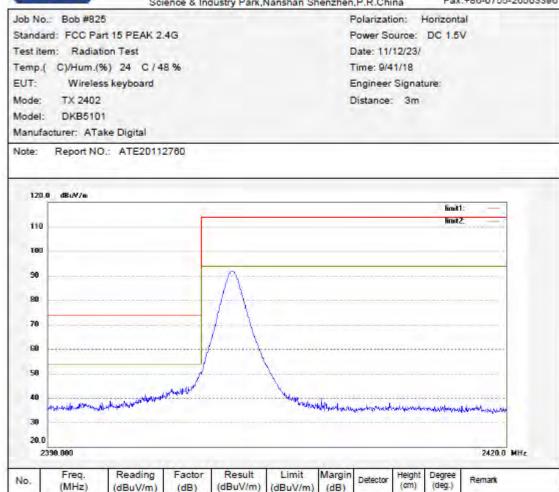
Engineer Signature: Bob

Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396





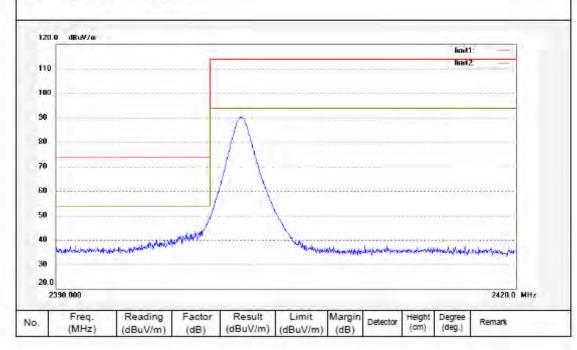
F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 966 chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Bob #824 Standard: FCC Part 15 PEAK 2.4G Test item: Radiation Test Temp.(C)/Hum.(%) 24 C / 48 %

EUT: Wireless keyboard

Model: TX 2402 Model: DKB5101 Manufacturer: ATake Digital Polarization: Vertical Power Source: DC 1.5V Date: 11/12/23/

Date: 11/12/23/ Time: 9/39/39 Engineer Signature: Distance: 3m





(MHz)

(dBuV/m)

(dB)

ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,

Site: 966 chamber Tel:+86-0755-26503290

Fax:+86-0755-26503396 Science & Industry Park, Nanshan Shenzhen, P.R. China Job No.: Bob #822 Polarization: Horizontal Standard: FCC Part 15 PEAK 2.4G Power Source: DC 1.5V Test item: Radiation Test Date: 11/12/23/ Temp.(C)/Hum.(%) 24 C / 48 % Time: 9/35/59 EUT: Wireless keyboard Engineer Signature: TX 2478 Distance: 3m Mode: Model: DKB5101 Manufacturer: ATake Digital Note: Report NO.: ATE20112760 120.0 dBuV/m finit? 110 100 80 Gill 2460.000 2490.0 MHz Reading Result Limit Margin Factor Freq. Height (cm) Degree (deg.) Detector No. Remark

(dBuV/m)

(dBuV/m)

(dB)



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Fax:+86-0755-26503296 Science & Industry Park, Nanshan Shenzhen, P.R. China

Site: 966 chamber

Standard: FCC Part 15 PEAK 2.4G Test item: Radiation Test Temp.(C)/Hum.(%) 24 C / 48 %

EUT: Wireless keyboard TX 2478 Mode:

Model: DKB5101 Manufacturer: ATake Digital

Report NO.: ATE20112760

Polarization: Vertical Power Source: DC 1.5V

Date: 11/12/23/ Time: 9/37/36 Engineer Signature: Distance: 3m

