APPLICATION CERTIFICATION

On Behalf of Jiaxing Shufude Electric Bed Co., Ltd.

Remote control
Model No.: SFD-K-16-A, SFD-K-16-B

FCC ID: WKZSFDK16

Prepared for : Jiaxing Shufude Electric Bed Co., Ltd.

Address : East No.07 Provincial Road, Tengyun Village

Wangjiangjing Development Zone, Jiaxing, Zhejiang

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 : ATE20081442

Date of Test : July 26 - August 1, 2008

Date of Report : August 2, 2008

TABLE OF CONTENTS

Description Page **Test Report Certification** GENERAL INFORMATION4 1.1. 1.2. 1.3. Measurement Uncertainty.......5 MEASURING DEVICE AND TEST EQUIPMENT......6 2. 3. SUMMARY OF TEST RESULTS......7 4. THE FIELD STRENGTH OF RADIATION EMISSION8 4.1. 4.2. 4.3. 4.4. 4.5. 4.6. 5. 20DB OCCUPIED BANDWIDTH14 5.1. 5.2. 5.3. 5.4. 5.5. Test Procedure 15 5.6. 6. RELEASE TIME MEASUREMENT......17 6.1. 6.2. 6.3. 6.4. Test Procedure 18 6.5.

Test Procedure 21

Measurement Result 22

APPENDIX I (TEST CURVES) (15 pages)

6.6.

7.1. 7.2.

7.3.

7.4.

7.5. 7.6.

7.

Test Report Certification

Applicant : Jiaxing Shufude Electric Bed Co., Ltd.Manufacturer : Jiaxing Shufude Electric Bed Co., Ltd.

EUT Description : Remote control

(A) MODEL NO.: SFD-K-16-A, SFD-K-16-B

(B) SERIAL NO.: N/A

(C) POWER SUPPLY: 4.5V DC ("AAA" batteries 3×)

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.231: 2007 & ANSI 63.4: 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 Section 15.231. 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 :	July 26 - August 1, 2008	
Prepared by :	sky Long	
	(Engineer)	
Approved & Authorized Signer:	Seem (-)	
	(Manager)	

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT : Remote control

Model Number : SFD-K-16-A, SFD-K-16-B

(Note: Model SFD-K-16-A is identical to model SFD-K-16-B, except the number of function keys is the only difference. Therefore only model

SFD-K-16-A (which with more function key) is tested.)

Power Supply : 4.5V DC ("AAA" batteries $3\times$)

Operation Frequency : 433.050-433.750MHz (step 0.1MHz) and

434.050-434.750MHz (step 0.1MHz)

Applicant : Jiaxing Shufude Electric Bed Co., Ltd.

Address : East No.07 Provincial Road, Tengyun Village

Wangjiangjing Development Zone, Jiaxing, Zhejiang

China

Manufacturer : Jiaxing Shufude Electric Bed Co., Ltd.

Address : East No.07 Provincial Road, Tengyun Village

Wangjiangjing Development Zone, Jiaxing, Zhejiang

China

Date of sample received: July 25, 2008

Date of Test : July 26 - August 1, 2008

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 = 4.12dB, k=2

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	03.29.2009
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	03.29.2009
Spectrum Analyzer	Agilent	E7405A	MY45115511	03.29.2009
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	03.31.2009
Loop Antenna	Schwarzbeck	FMZB1516	1516131	03.28.2009
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	03.29.2009
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	12.20.2008
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	10.10.2008
LISN	Rohde&Schwarz	ESH3-Z5	100305	03.29.2009
LISN	Schwarzbeck	NLSK8126	8126431	03.29.2009

3. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
Section 15.207	Conducted Emission	N/A
Section 15.231(b)	Radiated Emission	Compliant
Section 15.231(c)	20dB Bandwidth	Compliant
Section 15.231(a)(1)	Release Time	Compliant
	Measurement	

The product is a manually operated remote control transmitter. Section 15.231 (a) (2), (3), (4) and (5) are not applicable.

4. THE FIELD STRENGTH OF RADIATION EMISSION

4.1.Block Diagram of Test Setup

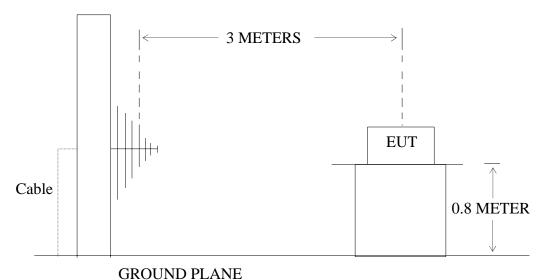
4.1.1.Block diagram of connection between the EUT and simulators

EUT

(EUT: Remote control)

4.1.2. Anechoic Chamber Test Setup Diagram

ANTENNA ELEVATION VARIES FROM 1 TO 4 METERS



(EUT: Remote control)

4.2. The Field Strength of Radiation Emission Measurement Limits

4.2.1.Radiation Emission Measurement Limits According to FCC Part 15 Section 15.231(b)

Frequency Range of Fundamental	Field Strength of Fundamental Emission [Average] [µV/m]	Field Strength of Spurious Emission [Average] [µV/m]
[MHz] 40.66-40.70	2250	225
70-130	1250	125
130-174	1250-3750	125-375
174-260	3750	375
260-470	3750-12500	375-1250
Above 470	12500	1250

Where F is the frequency in MHz, the formulas for calculating the maximum permitted fundamental field strengths are as follows: for the band 130-174 MHz, uV/m at 3 meters = 56.81818(F) - 6136.3636; for the band 260-470 MHz, uV/m at 3 meters = 41.6667(F) - 7083.3333. The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level.

4.2.2. Restricted Band Radiation Emission Measurement Limits According to FCC part 15 Section 15.205 and Section15.209.

4.3. Configuration of EUT on Measurement

The following equipment is 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. Remote control (EUT)

Model Number : SFD-K-16-A

Serial Number : N/A

Manufacturer : Jiaxing Shufude Electric Bed 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 measuring modes (TX 433.050MHz, TX 433.750MHz, TX 434.750MHz) measure it.

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 EUT location must be manipulated according to ANSI 63.4 on radiated emission measurement.

The bandwidth of test receiver is set at 120kHz in 30-1000MHz, and 1MHz in 1000-5000MHz.

The frequency range from 30MHz to 5000MHz is checked.

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

The frequency range 30MHz to 4000MHz is investigated.

Date of Test: 25°C July 26 – August 1, 2008 Temperature: EUT: Remote control Humidity: 52% 4.5V DC ("AAA" batteries $\overline{3\times}$) Model No.: SFD-K-16-A Power Supply: Test Mode: TX 433.050MHz Test Engineer: Feng

Frequency (MHz)	Reading (dBµV/m)	Factor Corr.	Average Factor	Result(c	dBμV/m)	Limit(dBμV/m)	Margi	n(dB)	Polarization
	PEAK	(dB)	(dB)	AV	PEAK	AV	PEAK	AV	PEAK	
433.0500	55.94	22.95	-15.5	63.39	78.89	80.8	100.8	-17.41	-21.91	
866.1014	23.96	28.64	-15.5	37.10	52.60	60.8	80.8	-23.70	-28.20	
1299.151	58.80	-12.20	-15.5	31.10	46.60	60.8	80.8	-34.02	-38.52	Horizontal
1732.208	57.39	-10.37	-15.5	31.52	47.02	60.8	80.8	-29.28	-33.78	
433.0500	45.81	22.95	-15.5	53.26	68.76	80.8	100.8	-27.54	-32.04	
866.1014	20.81	28.64	-15.5	33.95	49.45	60.8	80.8	-26.85	-31.35	**
1299.151	62.66	-12.20	-15.5	34.96	50.46	60.8	80.8	-25.84	-30.34	Vertical
1732.208	57.98	-10.37	-15.5	32.11	47.61	60.8	80.8	-28.69	-33.19	

Note:

1. *: Denotes restricted band of operation.

Measurements were made using a peak detector and average detector. Any emission falling within the restricted bands of FCC Part 15 Section 15.205 were compliance with the emission limit of FCC Part 15 Section 15.209.

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

- 3. FCC Limit for Average Measurement = $41.6667(433.050)-7083.3333 = 10960.43114 \mu V/m = 80.8 d B \mu V/m$
- 4. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	July 26 – August 1, 2008	Temperature:	25°C
EUT:	Remote control	Humidity:	52%
Model No.:	SFD-K-16-A	Power Supply:	4.5V DC ("AAA" batteries 3×)
Test Mode:	TX 433.750MHz	Test Engineer:	Feng

Frequency	Reading	Factor	Average	Result(d	dBμV/m)	Limit(c	dBμV/m)	Margi	n(dB)	Polarization
(MHz)	(dBµV/m)	Corr.	Factor							
	PEAK	(dB)	(dB)	AV	PEAK	AV	PEAK	AV	PEAK	
433.7500	51.74	22.95	-15.5	59.19	74.69	80.8	100.8	-21.61	-26.11	
867.5145	20.33	28.64	-15.5	33.47	48.97	60.8	80.8	-27.33	-31.83	
*1301.252	57.49	-12.20	-15.5	29.79	45.29	54.0	74.0	-24.21	-28.71	Horizontal
1735.026	52.49	-10.39	-15.5	26.60	42.10	60.8	80.8	-34.20	-38.70	
433.7500	50.03	22.95	-15.5	57.48	72.98	80.8	100.8	-23.32	-27.82	
867.5145	15.77	28.64	-15.5	28.91	44.41	60.8	80.8	-31.89	-36.39	X7 .: 1
*1301.252	61.50	-12.20	-15.5	33.80	49.30	54.0	74.0	-20.20	-24.70	Vertical
1735.026	51.41	-10.39	-15.5	25.52	41.02	60.8	80.8	-35.28	-39.78	

Note:

1. *: Denotes restricted band of operation.

Measurements were made using a peak detector and average detector. Any emission falling within the restricted bands of FCC Part 15 Section 15.205 were compliance with the emission limit of FCC Part 15 Section 15.209.

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

- 3. FCC Limit for Average Measurement = $41.6667(433.750)-7083.3333 = 10989.59783 \mu V/m = 80.8 d B \mu V/m$
- 4. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	July 26 – August 1, 2008	Temperature:	25°C
EUT:	Remote control	Humidity:	52%
Model No.:	SFD-K-16-A	Power Supply:	4.5V DC ("AAA" batteries 3×)
Test Mode:	TX 434.750MHz	Test Engineer:	Feng

Frequency	Reading	Factor	Average	Result(dBμV/m)	Limit(dBμV/m)	Margi	n(dB)	Polarization
(MHz)	$(dB\mu V/m)$	Corr.	Factor							
	PEAK	(dB)	(dB)	AV	PEAK	AV	PEAK	AV	PEAK	
434.7500	53.77	22.93	-15.5	61.20	76.70	80.8	100.8	-19.60	-24.10	
869.5164	14.92	28.63	-15.5	28.05	43.55	60.8	80.8	-32.75	-37.25	
*1304.251	60.18	-12.19	-15.5	32.49	47.99	54.0	74.0	-21.51	-26.01	Horizontal
1739.019	51.02	-10.41	-15.5	25.11	40.61	60.8	80.8	-35.69	-40.19	
434.7500	44.64	22.93	-15.5	52.07	67.57	80.8	100.8	-28.73	-33.23	
869.5164	8.49	28.63	-15.5	21.62	37.12	60.8	80.8	-39.18	-43.68	T 1
*1304.251	60.53	-12.19	-15.5	32.84	48.34	54.0	74.0	-21.16	-25.66	Vertical
1739.019	49.22	-10.41	-15.5	23.31	38.81	60.8	80.8	-37.49	-41.99	

Note:

1. *: Denotes restricted band of operation.

Measurements were made using a peak detector and average detector. Any emission falling within the restricted bands of FCC Part 15 Section 15.205 were compliance with the emission limit of FCC Part 15 Section 15.209.

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

- 3. FCC Limit for Average Measurement = $41.6667(434.750)-7083.3333 = 11031.26453 \mu V/m = 80.8 d B \mu V/m$
- 4. The spectral diagrams in appendix I display the measurement of peak values.

5. 20DB OCCUPIED BANDWIDTH

5.1.Block Diagram of Test Setup

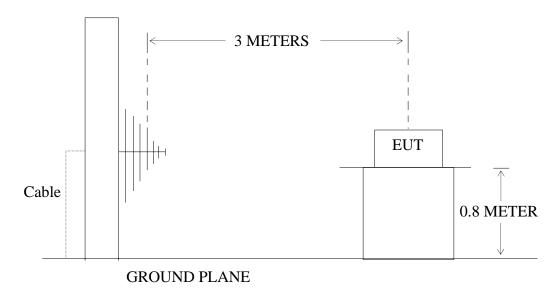
5.1.1.Block diagram of connection between the EUT and simulators

EUT

(EUT: Remote control)

5.1.2. Anechoic Chamber Test Setup Diagram

ANTENNA ELEVATION VARIES FROM 1 TO 4 METERS



(EUT: Remote control)

5.2. The Bandwidth of Emission Limit According To FCC Part 15 Section

15.231(c)

The bandwidth of emission shall be no wider than 0.25% of the center frequency. Therefore, the bandwidth of the emission limit is $433.050 \text{MHz} \times 0.25\% = 1.08 \text{MHz}$. Bandwidth is determined at the two points 20 dB down from the top of modulated carrier.

5.3.EUT Configuration on Measurement

The following equipment are installed on the bandwidth of 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.Remote control (EUT)

Model Number : SFD-K-16-A

Serial Number : N/A

Manufacturer : Jiaxing Shufude Electric Bed 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 measuring mode (TX 433.050MHz) measure it.

5.5.Test Procedure

- 5.5.1.Set SPA Center Frequency = Fundamental frequency, RBW = 10kHz, VBW = 30kHz, Span = 1000kHz.
- 5.5.2.Set SPA Max hold. Mark peak, -20dB

5.6.Measurement Result

The EUT does meet the FCC requirement.

-20dB bandwidth = 29.0kHz < 1.08MHz.

The spectral diagrams in appendix I.

6. RELEASE TIME MEASUREMENT

6.1.Block Diagram of Test Setup

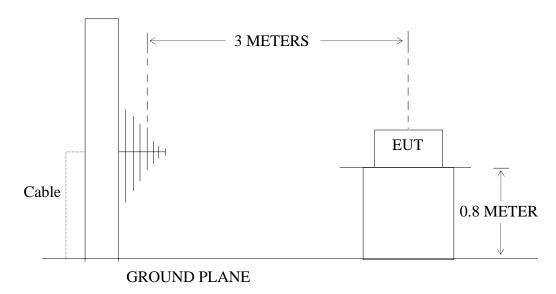
6.1.1.Block diagram of connection between the EUT and simulators

EUT

(EUT: Remote control)

6.1.2. Anechoic Chamber Test Setup Diagram

ANTENNA ELEVATION VARIES FROM 1 TO 4 METERS



(EUT: Remote control)

6.2. Release Time Measurement According To FCC Part 15 Section 15.231(a)

Section 15.231(a) (1) A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.

6.3.EUT Configuration on Measurement

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

6.3.1. Remote control (EUT)

Model Number : SFD-K-16-A

Serial Number : N/A

Manufacturer : Jiaxing Shufude Electric Bed Co., Ltd.

6.4. Operating Condition of EUT

- 6.4.1. Setup the EUT and simulator as shown as Section 6.1.
- 6.4.2. Turn on the power of all equipment.
- 6.4.3.Let the EUT work in measuring mode (TX 433.050MHz) measure it.

6.5.Test Procedure

- 6.5.1.Set SPA Center Frequency = Fundamental frequency, RBW = 100kHz, VBW = 300kHz, Span = 0Hz. Sweep time = 5 seconds.
- 6.5.2.Set EUT as normal operation and press Transmitter button.
- 6.5.3.Set SPA View. Delta Mark time.

6.6. Measurement Result

The release time less than 5 seconds.

Release Time= 2.095 s

The spectral diagrams in appendix I.

7. AVERAGE FACTOR MEASUREMENT

7.1.Block Diagram of Test Setup

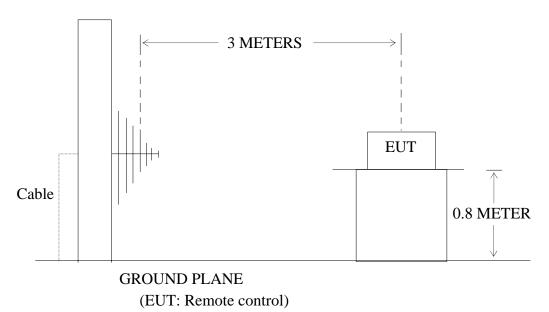
7.1.1.Block diagram of connection between the EUT and simulators

EUT

(EUT: Remote control)

7.1.2. Anechoic Chamber Test Setup Diagram

ANTENNA ELEVATION VARIES FROM 1 TO 4 METERS



7.2. Average factor Measurement according to ANSI 63.4: 2003

ANSI 63.4: 2003 Section 13.1.4.2 Devices transmitting pulsed emissions and subject to a limit requiring an average detector function for radiated emissions shall initially be measured with an instrument that uses a peak detector. A radiated emission measured with a peak detector may then be corrected to a true average using the appropriate factor for emission duty cycle. This correction factor relates the measured peak level to the average limit and is derived by averaging absolute field strength over one complete pulse train that is 0.1 s, or less, in length. If the pulse train is longer than 0.1 s, the average shall be determined from the average absolute field strength during the 0.1 s interval in which the field strength is at a maximum. Instructions on calculating the duty cycle of a transmitter with pulsed emissions are provided in ANSI 63.4 H.4, step j.

Average factor in $dB = 20 \log (duty \text{ cycle})$

7.3.EUT Configuration on Measurement

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

7.3.1. Remote control (EUT)

Model Number : SFD-K-16-A

Serial Number : N/A

Manufacturer : Jiaxing Shufude Electric Bed Co., Ltd.

7.4. Operating Condition of EUT

7.4.1. Setup the EUT and simulator as shown as Section 7.1.

7.4.2. Turn on the power of all equipment.

7.4.3.Let the EUT work in measuring mode (TX 433.050MHz) measure it.

7.5.Test Procedure

- 7.5.1.The time period over which the duty cycle is measured is 100 milliseconds, or the repetition cycle, whichever is a shorter time frame. The worst case (highest percentage on) duty cycle is used for the calculation.
- 7.5.2.Set SPA Center Frequency = Fundamental frequency, RBW = 100kHz, VBW = 300kHz, Span = 0Hz.
- 7.5.3.Set EUT as normal operation.
- 7.5.4.Set SPA View. Delta Mark time.

7.6. Measurement Result

The duty cycle is simply the on time divided by the period:

Effective period of 100 milliseconds = 16.8 ms

DC = 16.8 ms / 100 ms = 0.168

Therefore, the average factor is found by 20log0.168 = -15.5dB

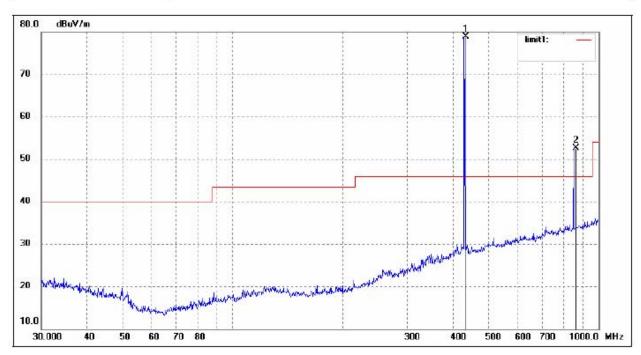
The spectral diagrams in appendix I.

APPENDIX I (Test Curves)



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 http://www.atc-lab.com

Job No.: RTTE #218 Polarziation: Horizontal DC 4.5V Standard: FCC Class B 3M Radiated Power Source: Test item: Date: 08/07/26/ **Radiation Test** Temp.('C)/Hum.(%RH): 25(°C)/52%RH Time: 11/18/03 EUT: Remote control Engineer Signature: Feng Mode: TX 433.050MHz Distance: 3m Model: SFD-K-16-A Manufacturer: Shufude Note: Sample No.:082364 Report No.:ATE20081442

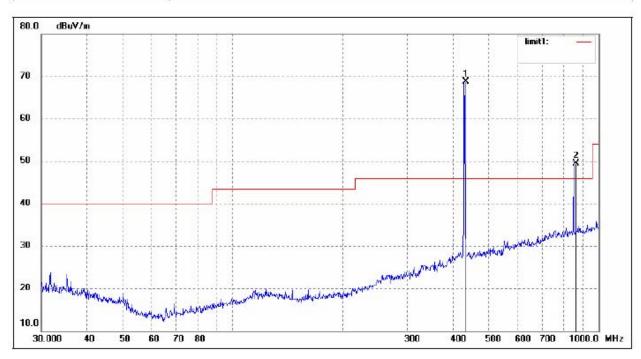


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	433.0500	55.94	22.95	78.89	100.8	-21.91	peak	Fundamental
2	866.1014	23.96	28.64	52.60	80.8	-28.20	peak	Harmonics



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 http://www.atc-lab.com

Job No.: RTTE #219 Polarziation: Vertical Standard: DC 4.5V FCC Class B 3M Radiated Power Source: Test item: Date: 08/07/26/ Radiation Test Temp.('C)/Hum.(%RH): 25(°C)/52%RH Time: 11/23/02 EUT: Remote control Engineer Signature: Feng Mode: TX 433.050MHz Distance: 3m Model: SFD-K-16-A Manufacturer: Shufude Note: Sample No.:082364 Report No.:ATE20081442

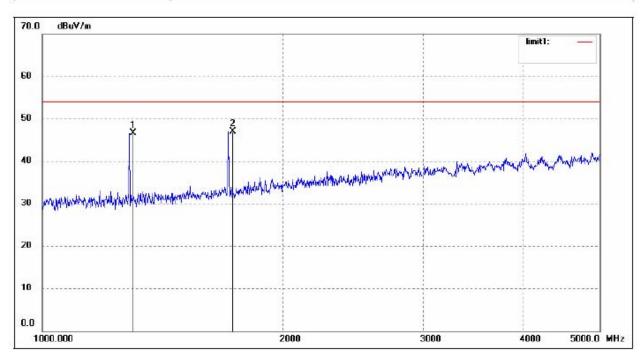


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	433.0500	45.81	22.95	68.76	100.8	-32.04	peak	Fundamental
2	866.1014	20.81	28.64	49.45	80.8	-31.35	peak	Harmonics



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 http://www.atc-lab.com

Job No.: RTTE #235 Polarziation: Horizontal DC 4.5V Standard: FCC Class B 3M Radiated Power Source: Test item: Date: 08/08/01/ **Radiation Test** 14/55/01 Temp.('C)/Hum.(%RH): 25(°C)/52%RH Time: EUT: Remote control Engineer Signature: Feng Mode: TX 433.050MHz Distance: 3m Model: SFD-K-16-A Manufacturer: Shufude Note: Sample No.:082364 Report No.:ATE20081442

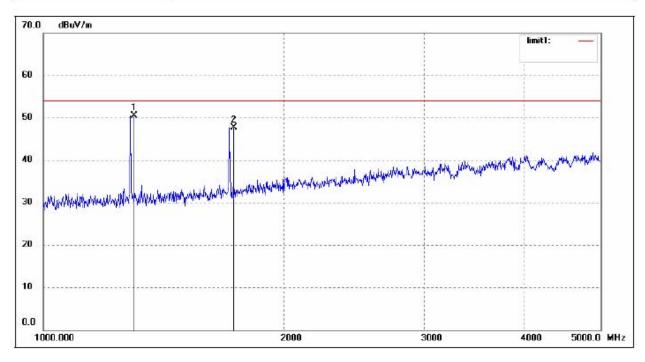


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	1299.151	58.80	-12.20	46.60	80.8	-38.52	peak	Harmonics
2	1732.208	57.39	-10.37	47.02	80.8	-33.78	peak	Harmonics



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 http://www.atc-lab.com

Job No.: RTTE #236 Polarziation: Vertical Standard: FCC Class B 3M Radiated Power Source: DC 4.5V Test item: Date: 08/08/01/ Radiation Test Temp.('C)/Hum.(%RH): 25(°C)/52%RH Time: 14/59/39 EUT: Remote control Engineer Signature: Feng Mode: TX 433.050MHz Distance: 3m Model: SFD-K-16-A Manufacturer: Shufude Note: Sample No.:082364 Report No.:ATE20081442

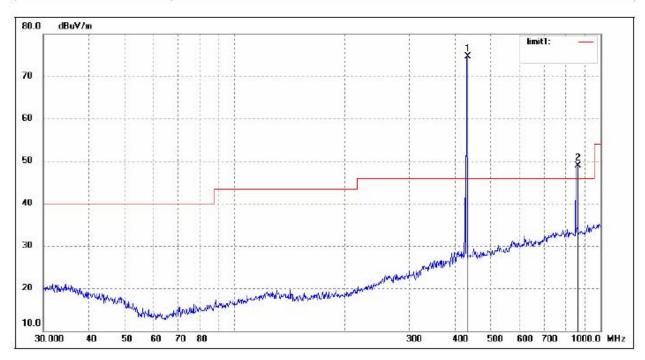


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	1299.151	62.66	-12.20	50.46	80.8	-30.34	peak	Harmonics
2	1732.208	57.98	-10.37	47.61	80.8	-33.19	peak	Harmonics



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 http://www.atc-lab.com

Job No.: RTTE #221 Polarziation: Horizontal DC 4.5V Standard: FCC Class B 3M Radiated Power Source: Test item: Date: 08/07/26/ **Radiation Test** Temp.('C)/Hum.(%RH): 25(°C)/52%RH Time: 11/29/02 EUT: Remote control Engineer Signature: Feng Mode: TX 433.750MHz Distance: 3m Model: SFD-K-16-A Manufacturer: Shufude Note: Sample No.:082364 Report No.:ATE20081442

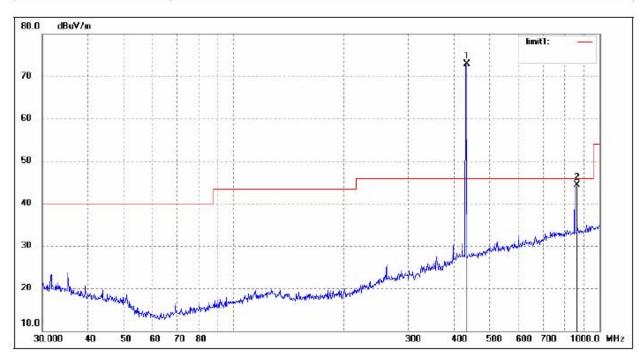


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	433.7500	51.74	22.95	74.69	100.8	-26.11	peak	Fundamental
2	867.5145	20.33	28.64	48.97	80.8	-31.83	peak	Harmonics



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 http://www.atc-lab.com

Job No.: RTTE #224 Polarziation: Vertical DC 4.5V Standard: FCC Class B 3M Radiated Power Source: Test item: Date: 08/07/26/ Radiation Test Temp.('C)/Hum.(%RH): 25(°C)/52%RH Time: 11/40/23 EUT: Remote control Engineer Signature: Feng Mode: TX 433.750MHz Distance: 3m Model: SFD-K-16-A Manufacturer: Shufude Note: Sample No.:082364 Report No.:ATE20081442

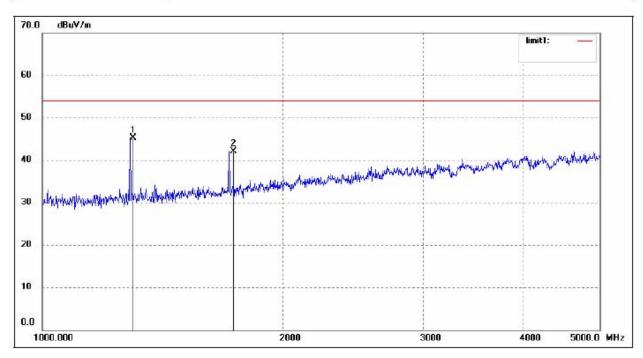


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	433.7500	50.03	22.95	72.98	100.8	-27.82	peak	Fundamental
2	867.5145	15.77	28.64	44.41	80.8	-36.39	peak	Harmonics



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 http://www.atc-lab.com

Job No.: RTTE #238 Polarziation: Horizontal DC 4.5V Standard: FCC Class B 3M Radiated Power Source: Test item: Date: 08/08/01/ **Radiation Test** Temp.('C)/Hum.(%RH): 25(°C)/52%RH Time: 15/10/48 EUT: Remote control Engineer Signature: Feng Mode: TX 433.750MHz Distance: 3m Model: SFD-K-16-A Manufacturer: Shufude Note: Sample No.:082364 Report No.:ATE20081442

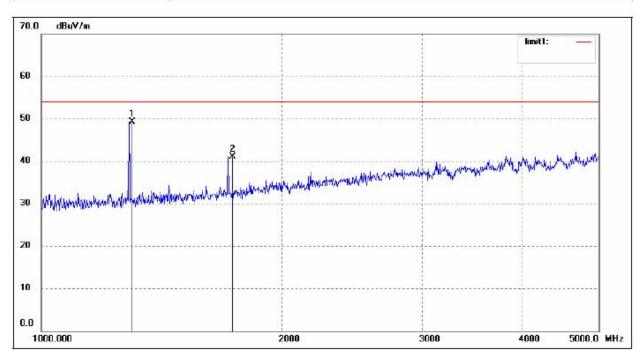


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	1301.252	57.49	-12.20	45.29	74.0	-28.71	peak	Restricted
2	1735.026	52.49	-10.39	42.10	80.8	-38.70	peak	Harmonics



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 http://www.atc-lab.com

Job No.: RTTE #237 Polarziation: Vertical Standard: FCC Class B 3M Radiated Power Source: DC 4.5V Test item: Date: 08/08/01/ Radiation Test Temp.('C)/Hum.(%RH): 25(°C)/52%RH Time: 15/06/54 EUT: Remote control Engineer Signature: Feng Mode: TX 433.750MHz Distance: 3m Model: SFD-K-16-A Manufacturer: Shufude Note: Sample No.:082364 Report No.:ATE20081442

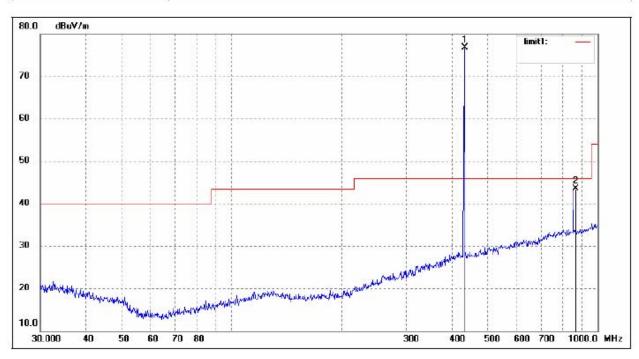


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	1301.252	61.50	-12.20	49.30	74.0	-24.70	peak	Restricted
2	1735.026	51.41	-10.39	41.02	80.8	-39.78	peak	Harmonics



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 http://www.atc-lab.com

Job No.: RTTE #222 Polarziation: Horizontal DC 4.5V Standard: FCC Class B 3M Radiated Power Source: Test item: Date: 08/07/26/ **Radiation Test** Temp.('C)/Hum.(%RH): 25(°C)/52%RH Time: 11/32/37 EUT: Remote control Engineer Signature: Feng Mode: TX 434.750MHz Distance: 3m Model: SFD-K-16-A Manufacturer: Shufude Note: Sample No.:082364 Report No.:ATE20081442

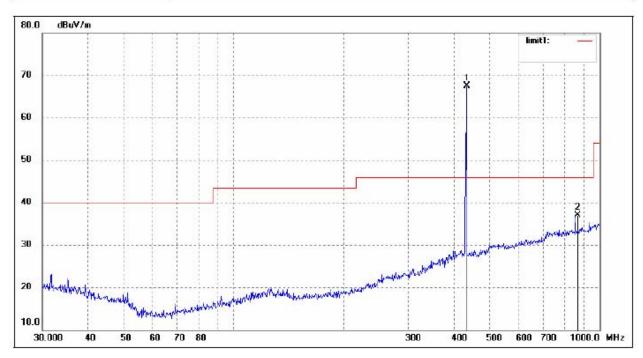


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	434.7500	53.77	22.93	76.70	100.8	-24.10	peak	Fundamental
2	869.5164	14.92	28.63	43.55	80.8	-37.25	peak	Harmonics



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 http://www.atc-lab.com

Job No.: RTTE #223 Polarziation: Vertical Standard: FCC Class B 3M Radiated Power Source: DC 4.5V Test item: Date: 08/07/26/ Radiation Test Temp.('C)/Hum.(%RH): 25(°C)/52%RH Time: 11/35/33 EUT: Remote control Engineer Signature: Feng Mode: TX 434.750MHz Distance: 3m Model: SFD-K-16-A Manufacturer: Shufude Note: Sample No.:082364 Report No.:ATE20081442

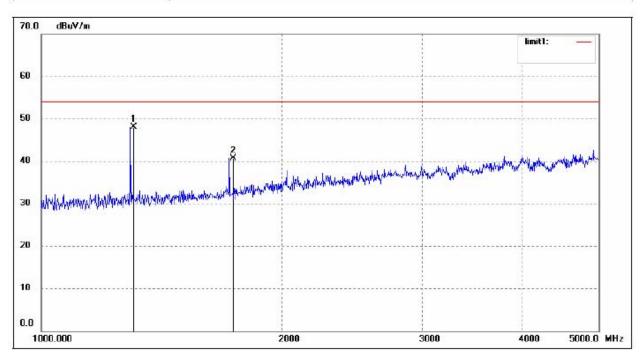


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	434.7500	44.64	22.93	67.57	100.8	-33.23	peak	Fundamental
2	869.5164	8.49	28.63	37.12	80.8	-43.68	peak	Harmonics



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 http://www.atc-lab.com

Job No.: RTTE #239 Polarziation: Horizontal DC 4.5V Standard: FCC Class B 3M Radiated Power Source: Test item: Date: 08/08/01/ **Radiation Test** Temp.('C)/Hum.(%RH): 25(°C)/52%RH Time: 15/16/04 EUT: Remote control Engineer Signature: Feng Mode: TX 434.750MHz Distance: 3m Model: SFD-K-16-A Manufacturer: Shufude Note: Sample No.:082364 Report No.:ATE20081442

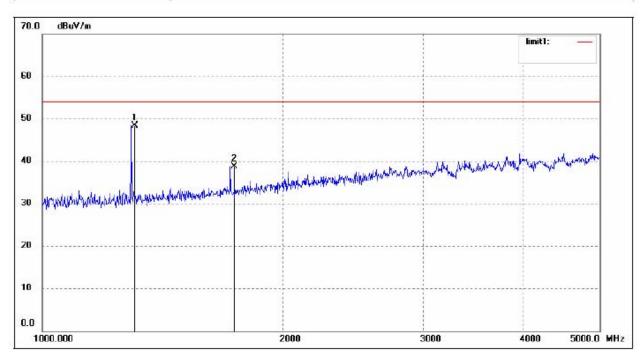


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	1304.251	60.18	-12.19	47.99	74.0	-26.01	peak	Restricted
2	1739.019	51.02	-10.41	40.61	80.8	-40.19	peak	Harmonics

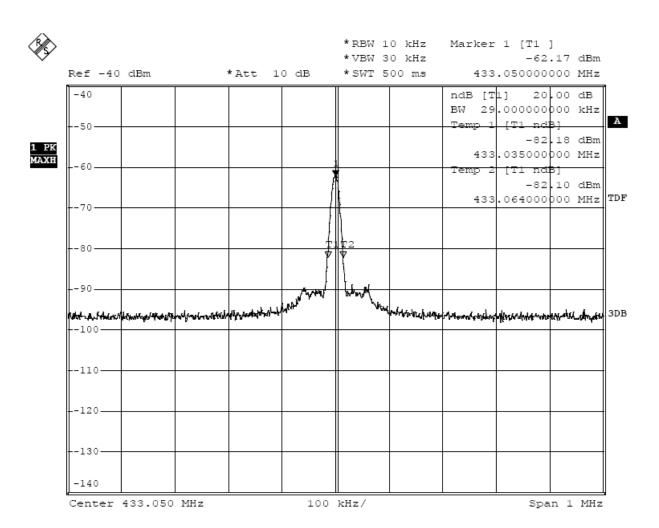


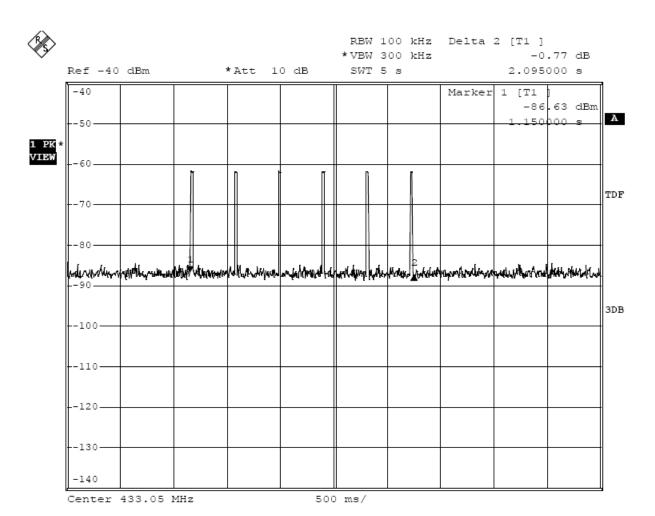
F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Tel:+86-0755-26503290 Fax:+86-0755-26503396 http://www.atc-lab.com

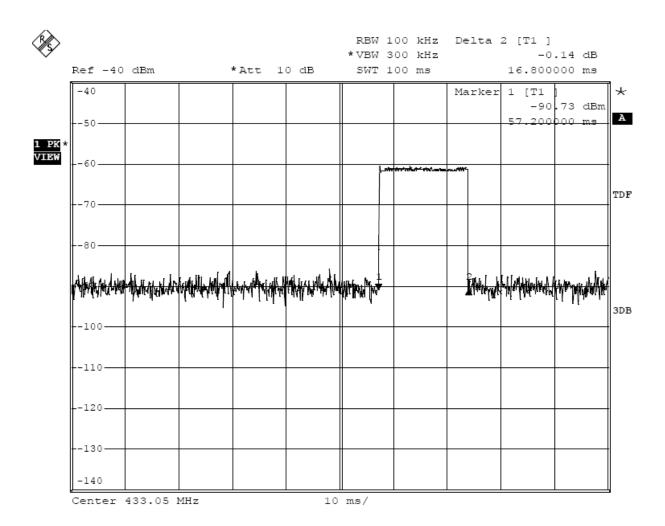
Job No.: RTTE #240 Polarziation: Vertical Standard: FCC Class B 3M Radiated Power Source: DC 4.5V Test item: Date: 08/08/01/ Radiation Test Temp.('C)/Hum.(%RH): 25(°C)/52%RH Time: 15/20/24 EUT: Remote control Engineer Signature: Feng Mode: TX 434.750MHz Distance: 3m Model: SFD-K-16-A Manufacturer: Shufude Note: Sample No.:082364 Report No.:ATE20081442



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	1304.251	60.53	-12.19	48.34	74.0	-25.66	peak	Restricted
2	1739.019	49.22	-10.41	38.81	80.8	-41.99	peak	Harmonics







The graph shows the duration of 'on' signal. From marker 1 to marker 2, duration is 16.8ms.