

APPLICATION CERTIFICATION FCC Part 15C

On Behalf of

China Industries Ltd T/A Wow! Stuff

RFX Racing system

Model No.: FX-1001

FCC ID: YCR-RFX-1001

Prepared for : China Industries Ltd T/A Wow! Stuff
Address : Creative Industries Centre, Wolverhampton Science
Park, Wolverhampton, WV10 9TG UK

Prepared by : ACCURATE TECHNOLOGY CO., LTD
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Report Number : ATE20150918
Date of Test : Apr 29-May 11, 2015
Date of Report : May 12, 2015

TABLE OF CONTENTS

Description	Page
Test Report Certification	
1. GENERAL INFORMATION	4
1.1. Description of Device (EUT)	4
1.2. Special Accessory and Auxiliary Equipment	4
1.3. Description of Test Facility	5
1.4. Measurement Uncertainty	5
2. MEASURING DEVICE AND TEST EQUIPMENT	6
3. OPERATION OF EUT DURING TESTING	7
3.1. Operating Mode	7
3.2. Configuration and peripherals	7
4. TEST PROCEDURES AND RESULTS	8
5. 20DB BANDWIDTH MEASUREMENT	9
5.1. Block Diagram of Test Setup	9
5.2. The Requirement For Section 15.215(c)	9
5.3. Operating Condition of EUT	9
5.4. Test Procedure	9
5.5. Test Result	10
6. BAND EDGE COMPLIANCE TEST	12
6.1. Block Diagram of Test Setup	12
6.2. The Requirement For Section 15.249	12
6.3. EUT Configuration on Measurement	12
6.4. Operating Condition of EUT	13
6.5. Test Procedure	13
6.6. Test Result	13
7. RADIATED SPURIOUS EMISSION TEST	18
7.1. Block Diagram of Test Setup	18
7.2. The Limit For Section 15.249	19
7.3. Restricted bands of operation	19
7.4. Configuration of EUT on Measurement	20
7.5. Operating Condition of EUT	20
7.6. Test Procedure	20
7.7. The Field Strength of Radiation Emission Measurement Results	21
8. ANTENNA REQUIREMENT	34
8.1. The Requirement	34
8.2. Antenna Construction	34

Test Report Certification

Applicant : China Industries Ltd T/A Wow! Stuff
Address : Creative Industries Centre, Wolverhampton Science Park,
Wolverhampton, WV10 9TG UK
Manufacturer : China Industries Ltd T/A Wow! Stuff
Address : Creative Industries Centre, Wolverhampton Science Park,
Wolverhampton, WV10 9TG UK
Product : RFX Racing system
Model No. : FX-1001
Trade Name : Wow! Stuff

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.249
ANSI C63.10: 2013

The EUT was tested according to FCC 47CFR 15.249 for compliance to FCC 47CFR 15.249 requirements

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 15.249 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 : Apr 29-May 11, 2015

Date of Report: May 12, 2015

Prepared by :


(Eric Zhang, Engineer)

Approved & Authorized Signer :


(Sean Liu, Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT	:	RFX Racing system
Model Number	:	FX-1001
Power Supply	:	4.5V DC (batteries 3×)
Operate Frequency	:	2405-2463.5MHz
Antenna Gain	:	0dBi
Antenna type	:	PCB Antenna
Applicant	:	China Industries Ltd T/A Wow! Stuff
Address	:	Creative Industries Centre, Wolverhampton Science Park, Wolverhampton, WV10 9TG UK
Manufacturer	:	China Industries Ltd T/A Wow! Stuff
Address	:	Creative Industries Centre, Wolverhampton Science Park, Wolverhampton, WV10 9TG UK
Date of sample received	:	Apr 29, 2015
Date of Test	:	Apr 29-May 11, 2015

1.2. Special Accessory and Auxiliary Equipment

N/A

1.3. 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

1.4. 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 dates	Cal. Interval
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 11, 2015	One Year
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 11, 2015	One Year
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 11, 2015	One Year
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 11, 2015	One Year
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 15, 2015	One Year
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 15, 2015	One Year
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 15, 2015	One Year
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1067	Jan. 15, 2015	One Year
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 11, 2015	One Year
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 11, 2015	One Year
Highpass Filter	Wainwright Instruments	WHKX3.6/18 G-10SS	N/A	Jan. 11, 2015	One Year
Band Reject Filter	Wainwright Instruments	WRCG2400/2 485-2375/2510 -60/11SS	N/A	Jan. 11, 2015	One Year

3. OPERATION OF EUT DURING TESTING

3.1.Operating Mode

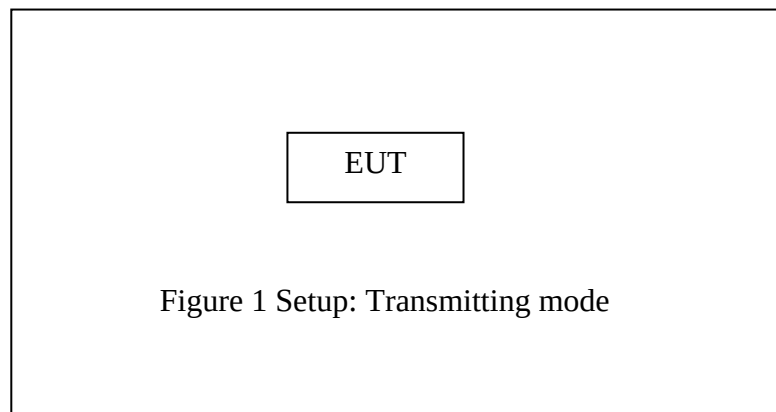
The mode is used: **Transmitting mode**

Low Channel: 2405MHz

Middle Channel: 2433.5MHz

High Channel: 2463.5MHz

3.2.Configuration and peripherals



4. TEST PROCEDURES AND RESULTS

FCC Rules	Description of Test	Result
Section 15.215(c)	20dB Bandwidth	Compliant
Section 15.249(d)	Band Edge Compliance Test	Compliant
Section 15.205(a), Section 15.209(a), Section 15.249, Section 15.35	Radiated Spurious Emission Test	Compliant
Section 15.207	AC Power Line Conducted Emission Test	N/A
Section 15.203	Antenna Requirement	Compliant

5. 20DB BANDWIDTH MEASUREMENT

5.1. Block Diagram of Test Setup



5.2. The Requirement For Section 15.215(c)

The bandwidth of a frequency hopping channel is the 20 dB emission bandwidth, measured with the hopping stopped. The system RF bandwidth is equal to the channel bandwidth multiplied by the number of channels in the hopset. The hopset shall be such that the near-term distribution of frequencies appears random, with sequential hops randomly distributed in both direction and magnitude of change in the hopset while the long-term distribution appears evenly distributed.

5.3. Operating Condition of EUT

5.3.1. Setup the EUT and simulator as shown as Section 5.1.

5.3.2. Turn on the power of all equipment.

5.3.3. Let the EUT work in TX modes measure it. The transmit frequency are 2405, 2433.5, 2463.5 MHz.

5.4. Test Procedure

5.4.1. Place the EUT on the table and set it in transmitting mode.

5.4.2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.

5.4.3. Set RBW of spectrum analyzer to 100 kHz and VBW to 300 kHz, Detector function=peak, Trace=max hold, Sweep=auto.

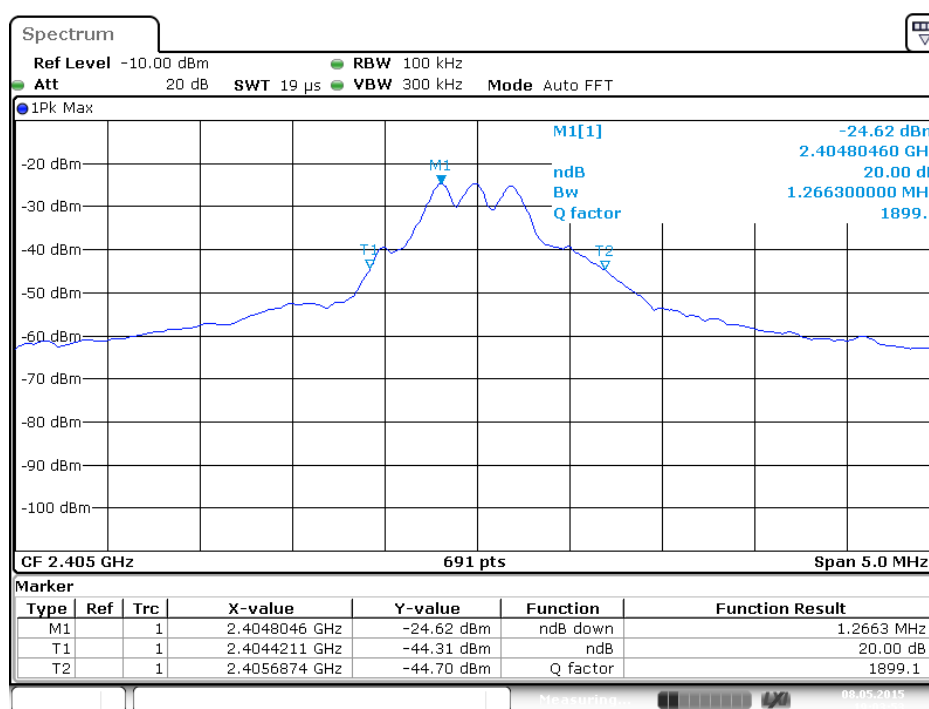
5.4.4. Set the measured low, middle and high frequency and test 20dB bandwidth with spectrum analyzer.

5.5. Test Result

Channel	Frequency(MHz)	20 dB Bandwidth(MHz)
Low	2405	1.266
Middle	2433.5	1.310
High	2463.5	1.397

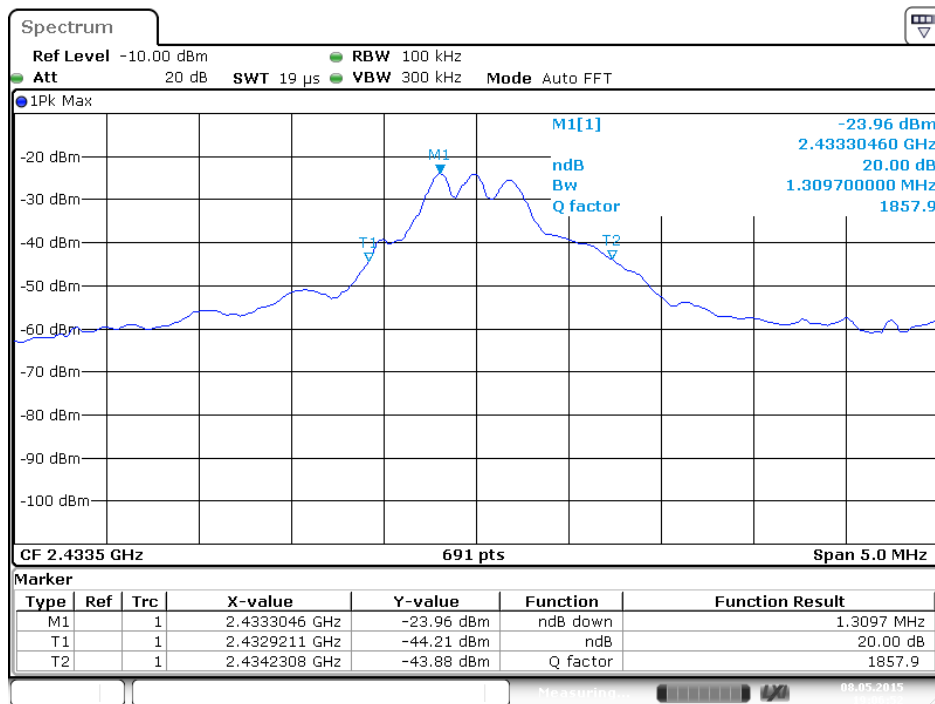
The spectrum analyzer plots are attached as below.

Low channel



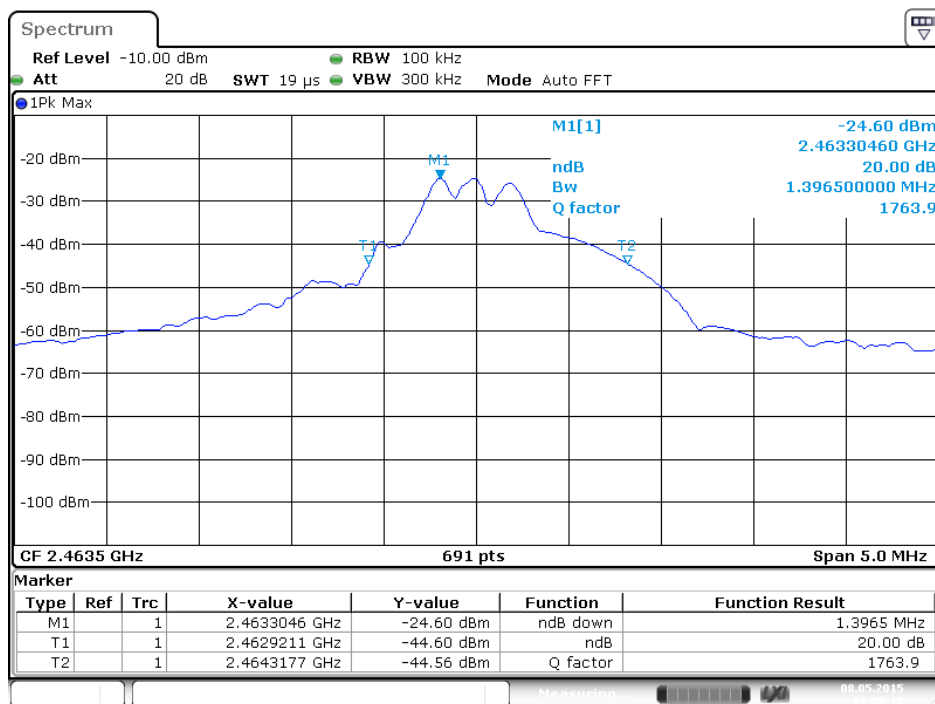
Date: 8.MAY.2015 19:03:53

Middle channel



Date: 8.MAY.2015 19:06:53

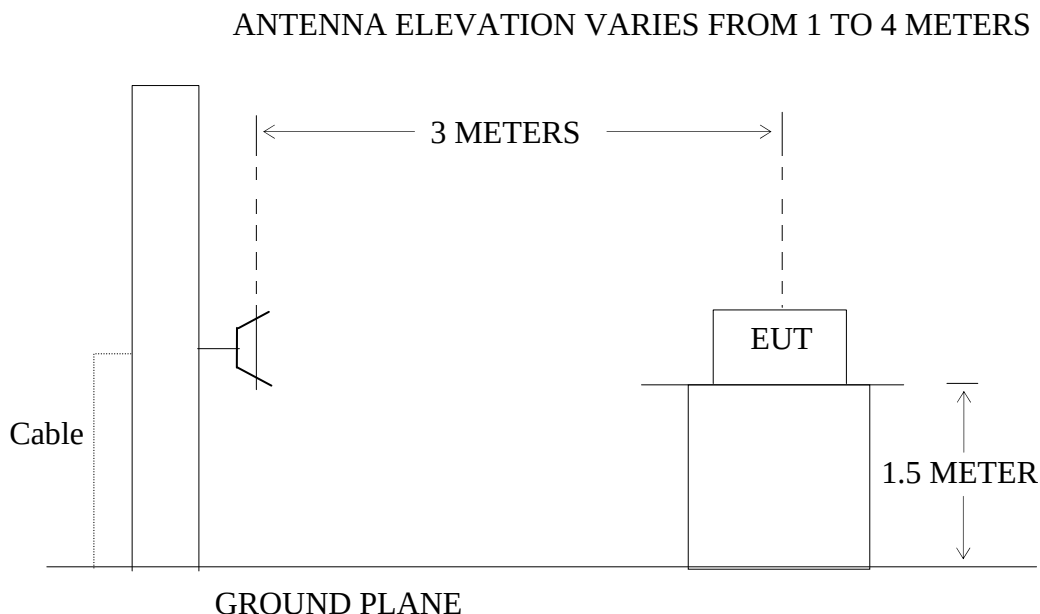
High channel



Date: 8.MAY.2015 19:08:16

6. BAND EDGE COMPLIANCE TEST

6.1. Block Diagram of Test Setup



6.2. The Requirement For Section 15.249

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph A8.4(4), the attenuation required shall be 30 dB instead of 20 dB. 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).

6.3. EUT Configuration on Measurement

The 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.

6.4. 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 TX modes measure it. The transmit frequency are 2405, 2463.5 MHz..

6.5. Test Procedure

Radiate Band Edge:

6.5.1. The EUT is placed on a turntable, which is 1.5m above the ground plane and worked at highest radiated power.

6.5.2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.

6.5.3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.

6.5.4. 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

6.5.5. The band edges was measured and recorded.

6.6. Test Result

Job No.: ricky 2015 #373

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: RFX Raing system

Mode: TX 2405MHz

Model: FX-1001

Manufacturer: China Industries Ltd T/A Wow Stuff

Polarization: Vertical

Power Source: DC 4.5V

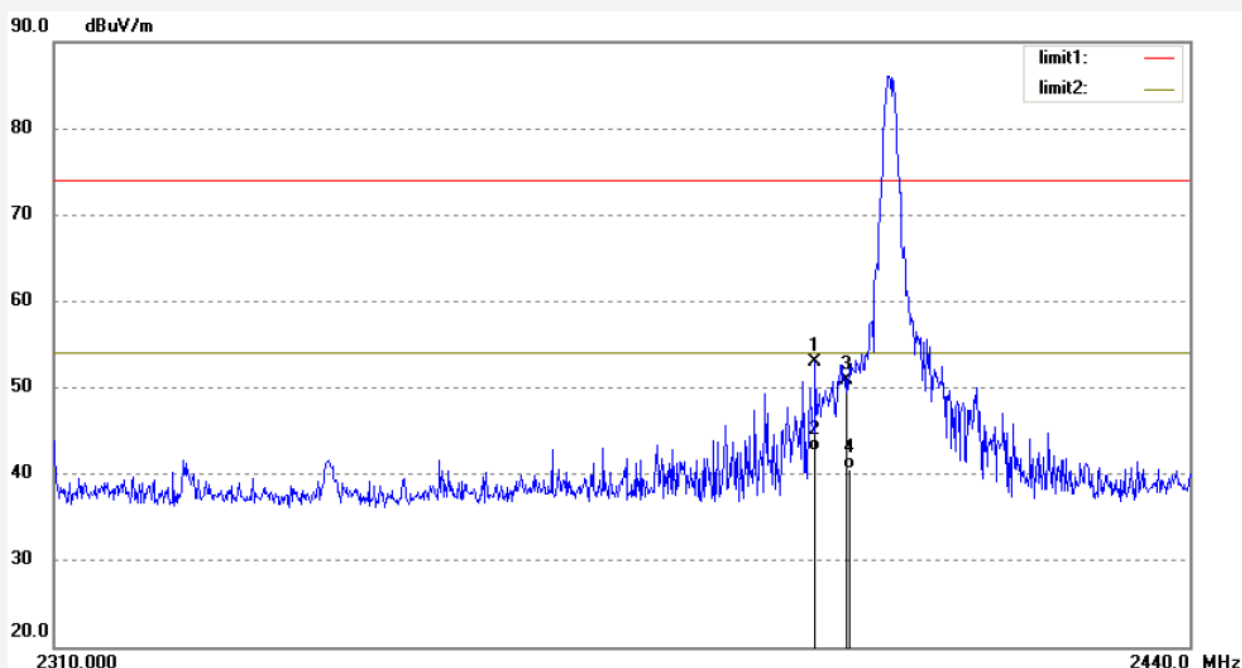
Date: 15/05/08/

Time: 9/24/29

Engineer Signature:

Distance: 3m

Note: Report NO.: ATE20150919



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2396.356	60.55	-7.52	53.03	74.00	-20.97	peak			
2	2396.356	50.21	-7.52	42.69	54.00	-11.31	AVG			
3	2400.000	58.42	-7.50	50.92	74.00	-23.08	peak			
4	2400.000	48.10	-7.50	40.60	54.00	-13.40	AVG			

Job No.: ricky 2015 #372

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: RFX Raing system

Mode: TX 2405MHz

Model: FX-1001

Manufacturer: China Industries Ltd T/A Wow Stuff

Polarization: Horizontal

Power Source: DC 4.5V

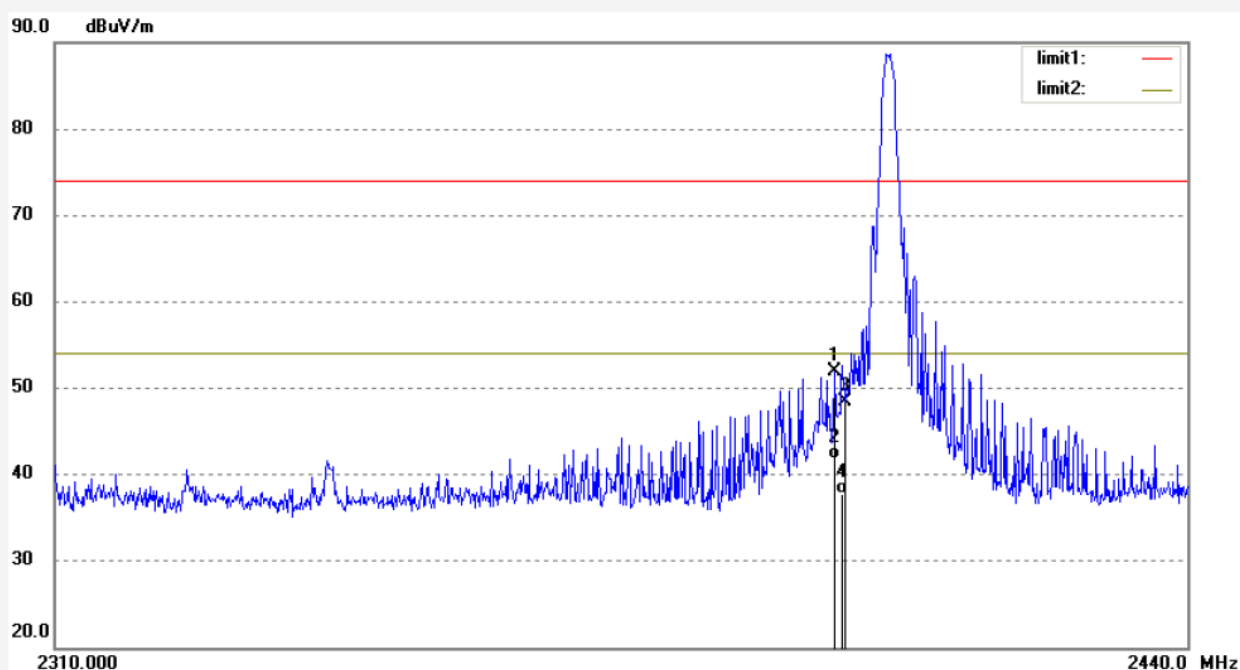
Date: 15/05/08/

Time: 9/20/29

Engineer Signature:

Distance: 3m

Note: Report NO.: ATE20150919



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2398.723	59.52	-7.51	52.01	74.00	-21.99	peak			
2	2398.723	49.35	-7.51	41.84	54.00	-12.16	AVG			
3	2400.000	55.88	-7.50	48.38	74.00	-25.62	peak			
4	2400.000	45.21	-7.50	37.71	54.00	-16.29	AVG			

Job No.: ricky 2015 #370

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: RFX Raing system

Mode: TX 2463.5MHz

Model: FX-1001

Manufacturer: China Industries Ltd T/A Wow Stuff

Polarization: Vertical

Power Source: DC 4.5V

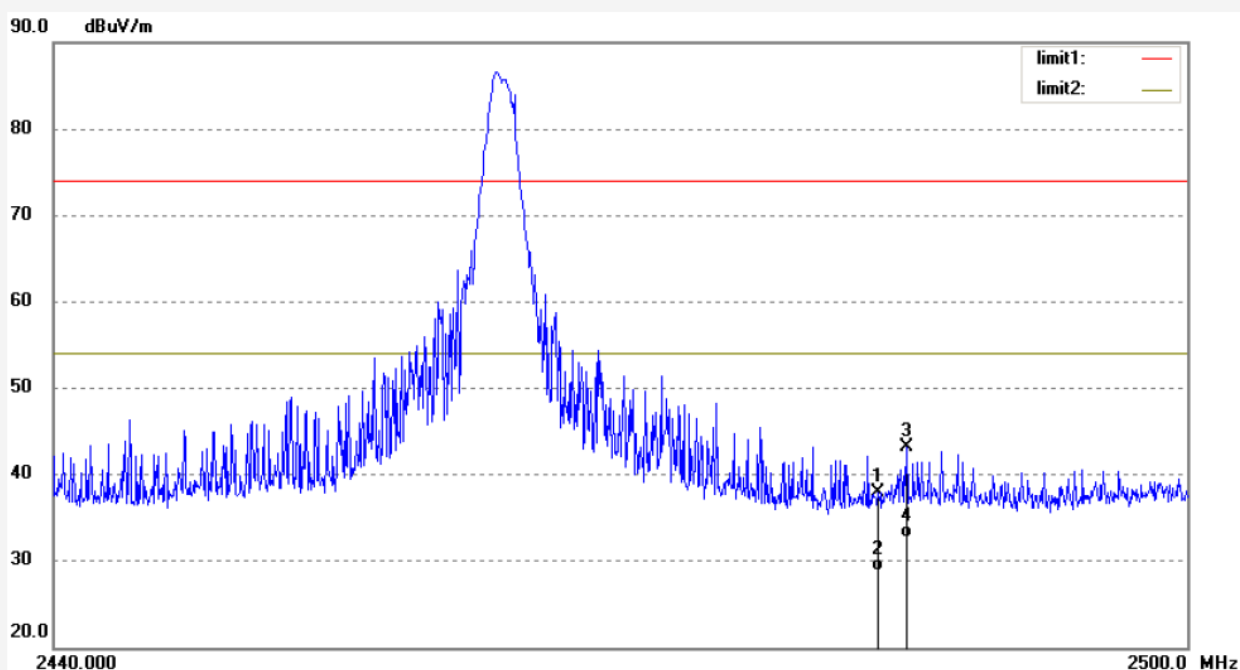
Date: 15/05/08/

Time: 9/15/55

Engineer Signature:

Distance: 3m

Note: Report NO.: ATE20150919



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	45.37	-7.38	37.99	74.00	-36.01	peak			
2	2483.500	36.25	-7.38	28.87	54.00	-25.13	AVG			
3	2485.014	50.62	-7.39	43.23	74.00	-30.77	peak			
4	2485.014	40.01	-7.39	32.62	54.00	-21.38	AVG			

Job No.: ricky 2015 #371

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: RFX Raing system

Mode: TX 2463.5MHz

Model: FX-1001

Manufacturer: China Industries Ltd T/A Wow Stuff

Polarization: Horizontal

Power Source: DC 4.5V

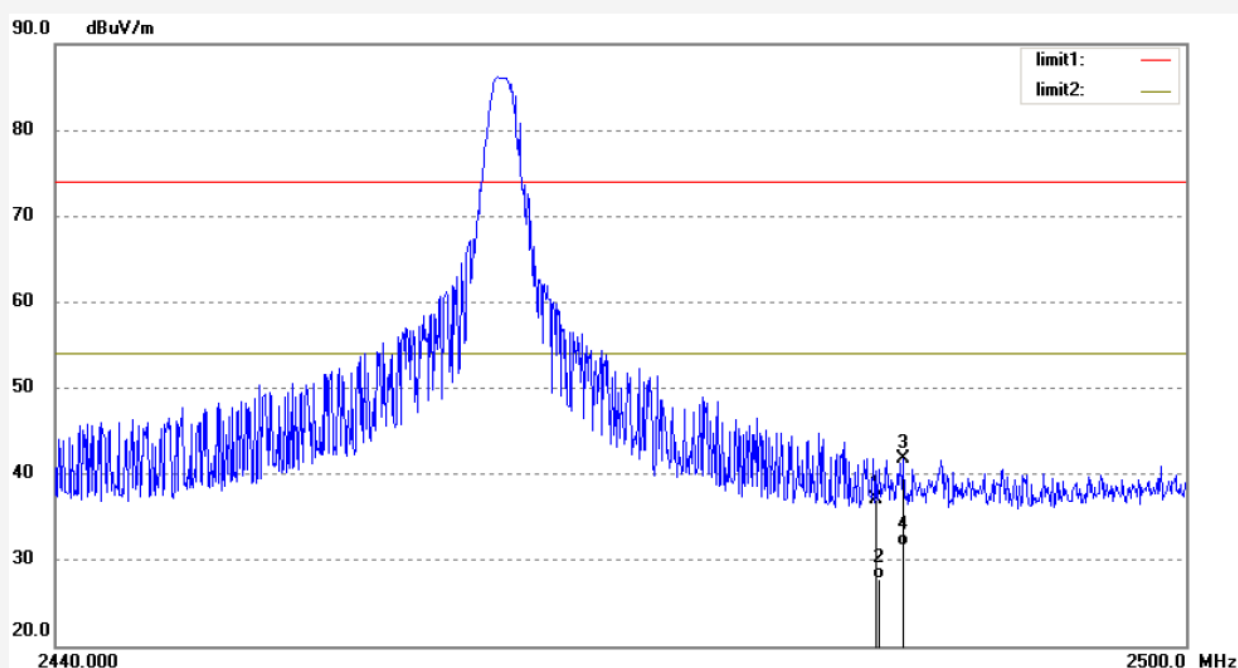
Date: 15/05/08/

Time: 9/18/27

Engineer Signature:

Distance: 3m

Note: Report NO.: ATE20150919



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	44.40	-7.38	37.02	74.00	-36.98	peak			
2	2483.500	35.10	-7.38	27.72	54.00	-26.28	AVG			
3	2484.893	49.25	-7.39	41.86	74.00	-32.14	peak			
4	2484.893	39.06	-7.39	31.67	54.00	-22.33	AVG			

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
3. Display the measurement of peak values.
4. The average measurement was not performed when peak measured data under the limit of average detection.

7. RADIATED SPURIOUS EMISSION TEST

7.1. Block Diagram of Test Setup

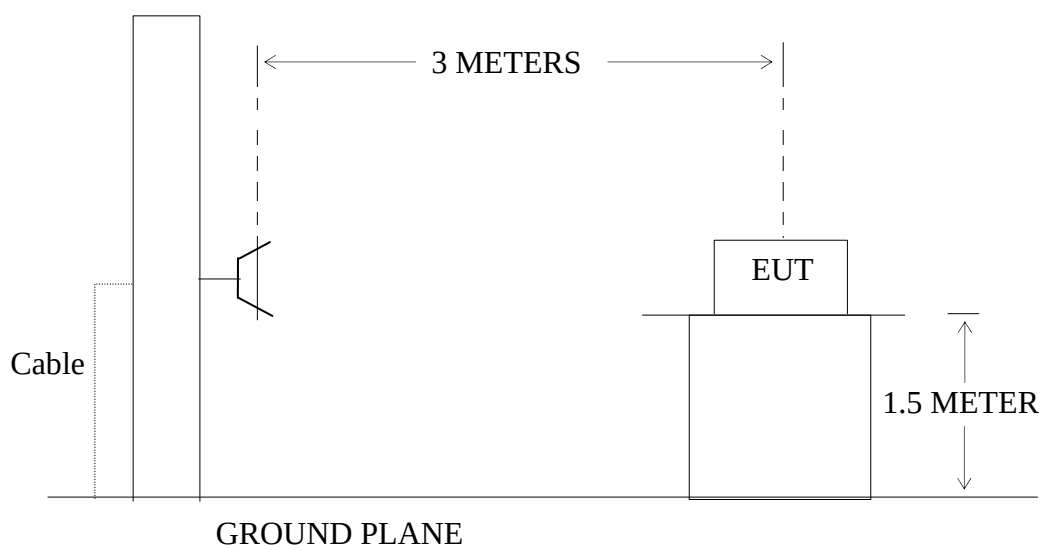
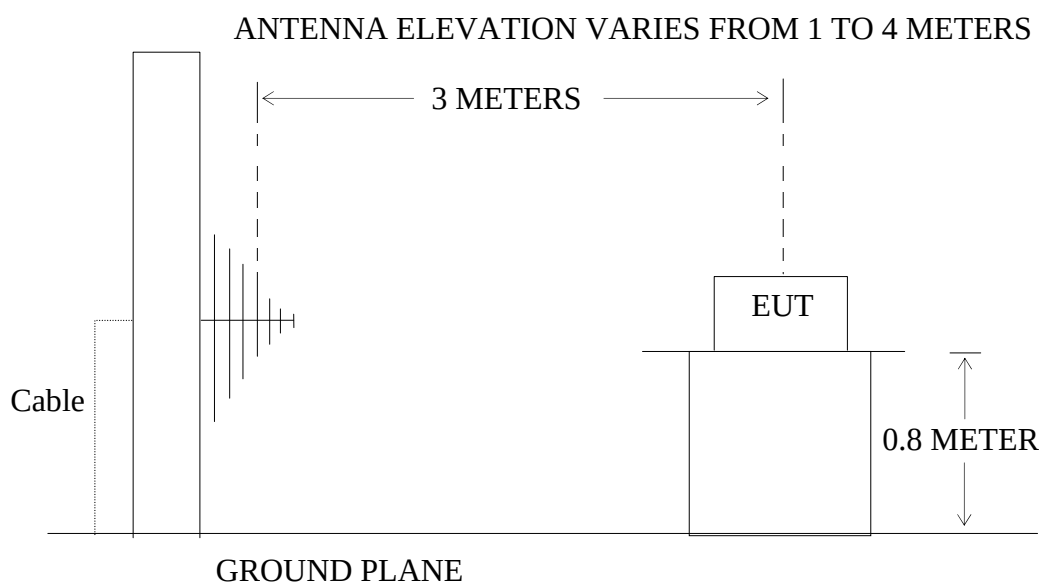
7.1.1. Block diagram of connection between the EUT and peripherals



Setup: Transmitting mode

(EUT: FX-1001)

7.1.2. Semi-Anechoic Chamber Test Setup Diagram



7.2.The Limit For Section 15.249

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph A8.4(4), the attenuation required under this paragraph shall be 30 dB instead of 20 dB. 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).

7.3.Restricted bands of operation

7.3.1.FCC Part 15.205 Restricted bands of operation

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

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(²)
13.36-13.41			

¹Until February 1, 1999, this restricted band shall be 0.490-0.510

²Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emission appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000MHz, Compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section

15.35 apply to these measurements.

7.4.Configuration of EUT on Measurement

The 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.

7.5.Operating Condition of EUT

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

7.5.2.Turn on the power of all equipment.

7.5.3.Let the EUT work in TX modes measure it. The transmit frequency are 2405, 2433.5, 2463.5MHz.

7.6.Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter(Below 1GHz) and 1.5m(above 1GHz) 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 C63.10: 2013 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver is set at 9 kHz in below 30MHz. and set at 120 kHz in 30-1000MHz, and 1MHz in above 1000MHz.

The frequency range from 9 kHz to 25GHz is checked.

The final measurement in band 9-90 kHz, 110-490 kHz 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.

RBW (120 kHz), VBW (300 kHz) for QP detector below 1GHz

Peak detector above 1GHz

RBW (1 MHz), VBW (3MHz) for Peak measurement

RBW (1 MHz), VBW (10Hz) for AV measurement

The field strength is calculated by adding the antenna factor, and cable loss, and subtracting the amplifier gain from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

7.7.The Field Strength of Radiation Emission Measurement Results

PASS.

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2405.00	81.95	93.62	-7.49	74.46	86.13	94.00	114.00	-19.54	-27.87	Vertical
2405.00	85.34	96.65	-7.49	77.85	89.16	94.00	114.00	-16.15	-24.84	Horizontal
2433.50	80.21	90.52	-7.40	72.81	83.12	94.00	114.00	-21.19	-30.88	Vertical
2433.50	81.56	92.40	-7.40	74.16	85.00	94.00	114.00	-19.84	-29.00	Horizontal
2463.50	82.45	93.49	-7.36	75.09	86.13	94.00	114.00	-18.91	-27.87	Vertical
2463.50	82.65	93.66	-7.36	75.29	86.30	94.00	114.00	-18.71	-27.70	Horizontal

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

3. The EUT is tested radiation emission in three axes. The worst emissions are reported in all channels.

4. The radiation emissions from 18-25GHz are not reported, because the test values lower than the limits of 20dB.

5. The average measurement was not performed when peak measured data under the limit of average detection.

6. The 18-25GHz emissions are not reported, because the levels are too low against the limit

Job No.: ricky 2015 #424

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: RFX Raing system

Mode: TX 2405MHz

Model: FX-1001

Manufacturer: China Industries Ltd T/A Wow Stuff

Polarization: Vertical

Power Source: DC 4.5V

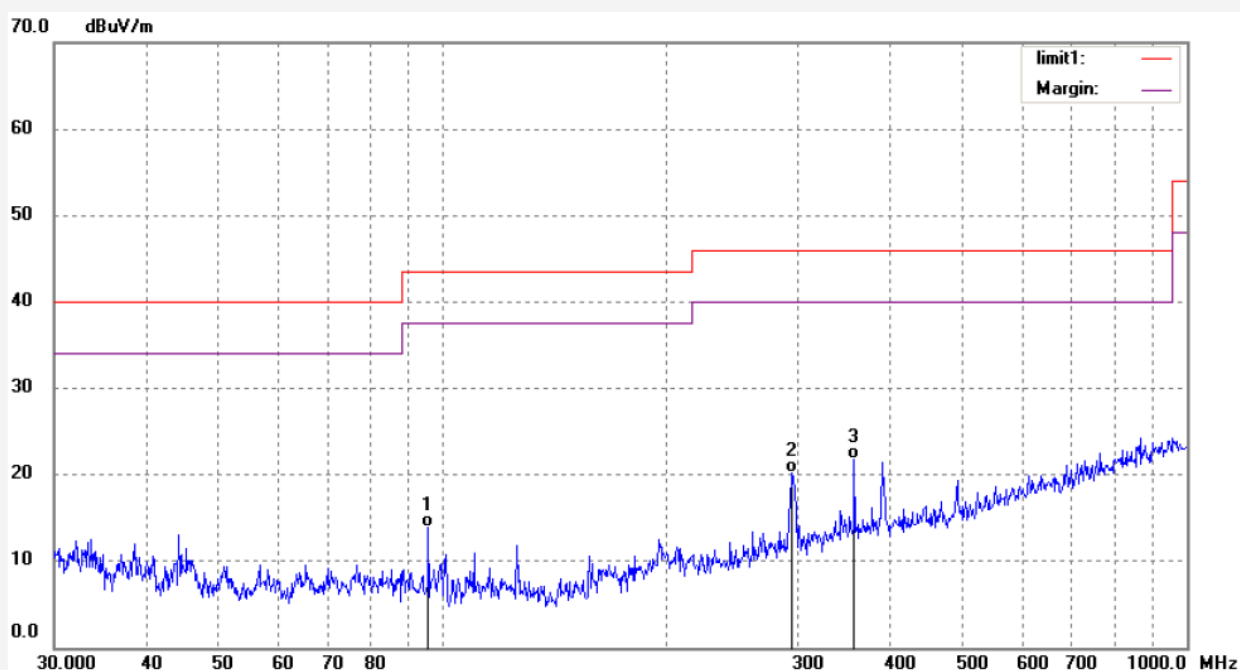
Date: 15/05/09/

Time: 9/47/25

Engineer Signature:

Distance: 3m

Note: Report NO.: ATE20150919



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	95.6484	35.89	-21.94	13.95	43.50	-29.55	QP			
2	294.4259	38.22	-17.96	20.26	46.00	-25.74	QP			
3	357.1923	37.80	-16.02	21.78	46.00	-24.22	QP			

Job No.: ricky 2015 #425

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: RFX Raing system

Mode: TX 2405MHz

Model: FX-1001

Manufacturer: China Industries Ltd T/A Wow Stuff

Polarization: Horizontal

Power Source: DC 4.5V

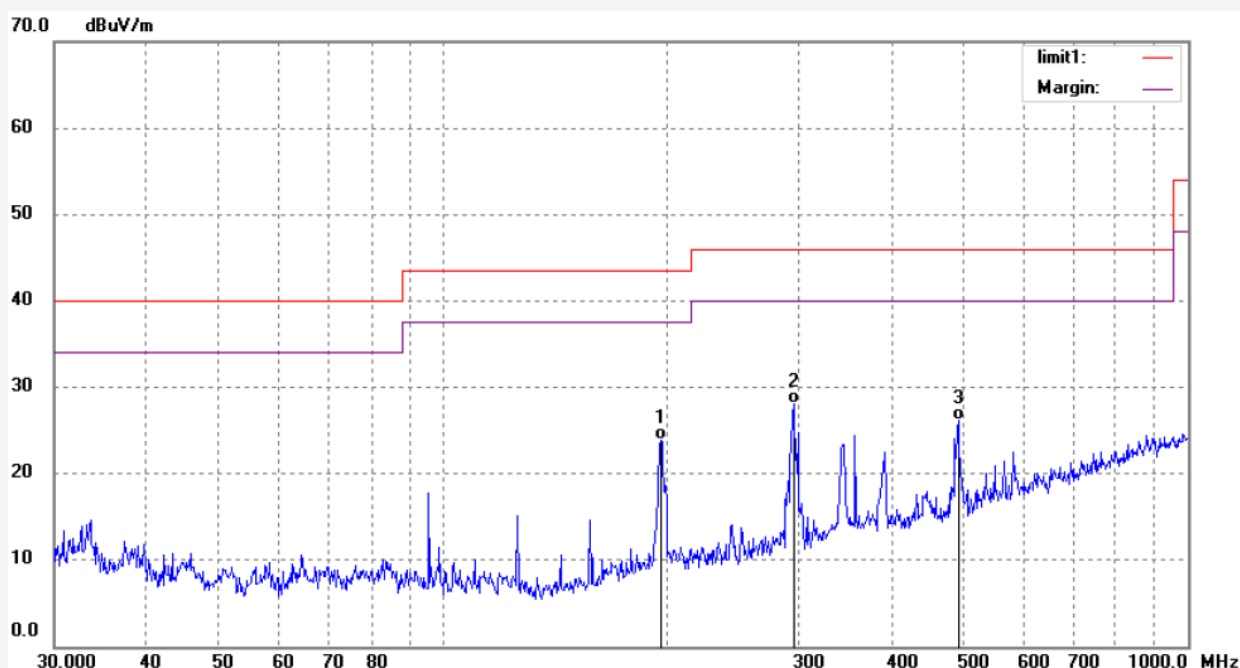
Date: 15/05/09/

Time: 9/48/00

Engineer Signature:

Distance: 3m

Note: Report NO.: ATE20150919



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	195.8701	44.38	-20.46	23.92	43.50	-19.58	QP			
2	295.4623	46.02	-17.94	28.08	46.00	-17.92	QP			
3	491.7699	40.16	-14.03	26.13	46.00	-19.87	QP			



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Report No.: ATE20150919

Page 24 of 34

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ricky 2015 #426

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: RFX Raing system

Mode: TX 2433.5MHz

Model: FX-1001

Manufacturer: China Industries Ltd T/A Wow Stuff

Polarization: Horizontal

Power Source: DC 4.5V

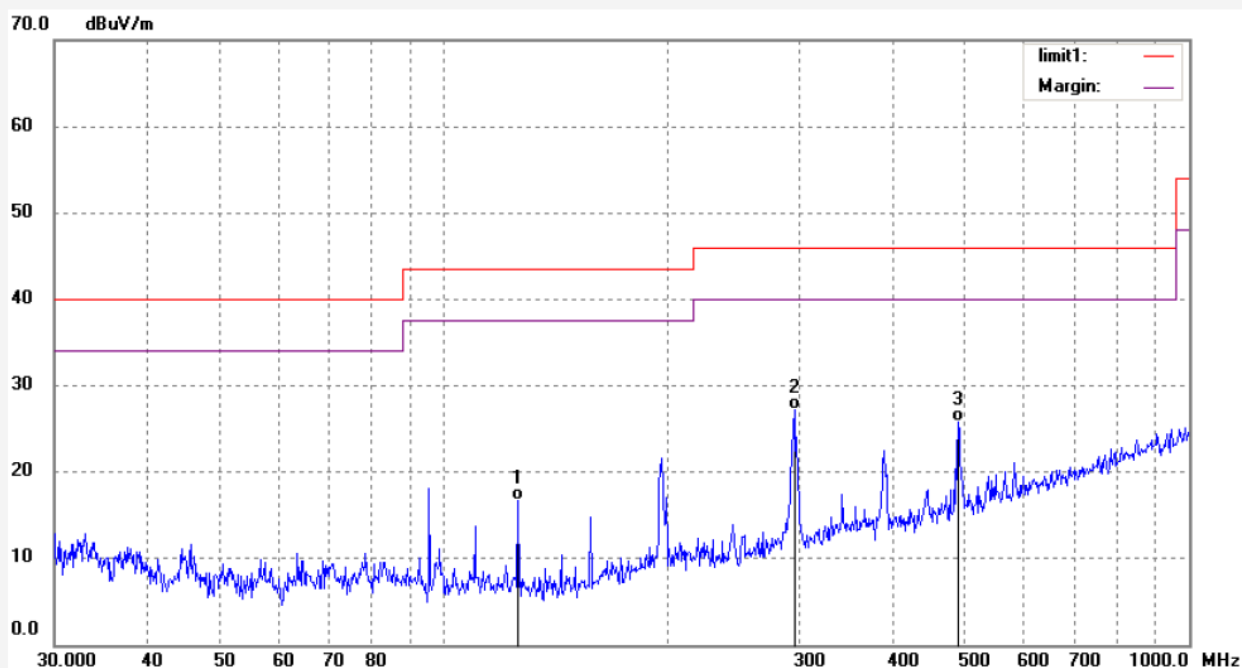
Date: 15/05/09/

Time: 9/48/30

Engineer Signature:

Distance: 3m

Note: Report NO.: ATE20150919



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	125.8058	39.55	-22.83	16.72	43.50	-26.78	QP			
2	295.4623	45.22	-17.94	27.28	46.00	-18.72	QP			
3	490.0450	39.94	-14.05	25.89	46.00	-20.11	QP			



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Report No.: ATE20150919

Page 25 of 34

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ricky 2015 #427

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: RFX Raing system

Mode: TX 2433.5MHz

Model: FX-1001

Manufacturer: China Industries Ltd T/A Wow Stuff

Polarization: Vertical

Power Source: DC 4.5V

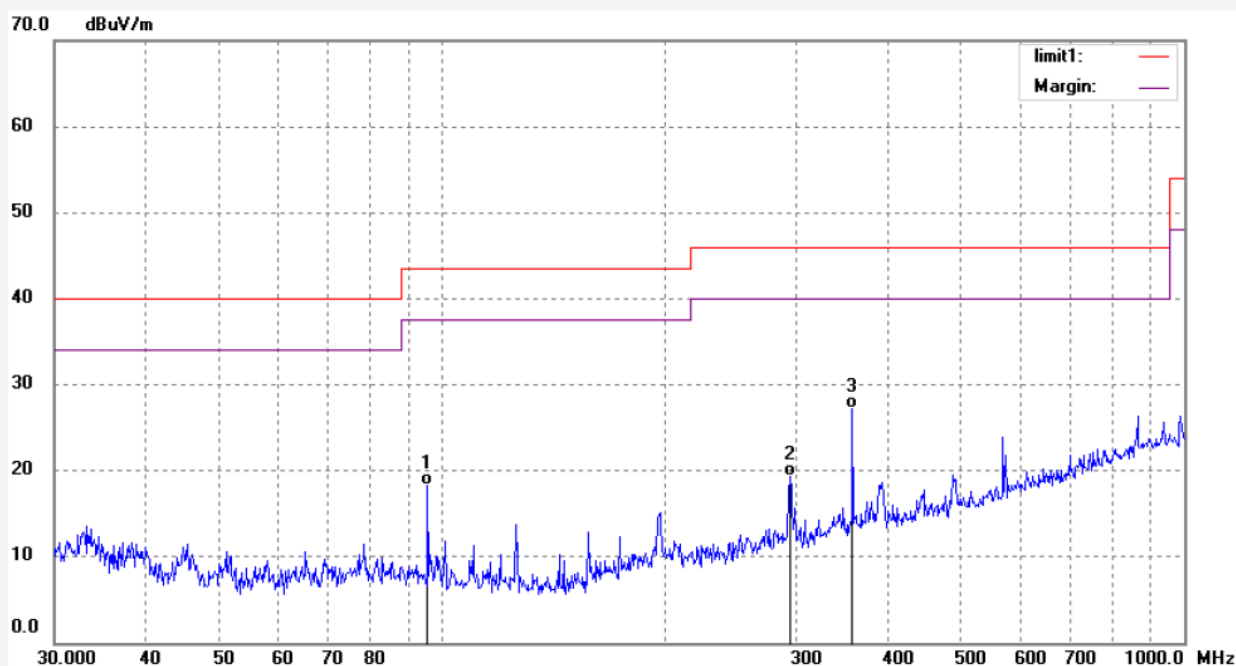
Date: 15/05/09/

Time: 9/49/04

Engineer Signature:

Distance: 3m

Note: Report NO.: ATE20150919



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	95.6484	40.20	-21.94	18.26	43.50	-25.24	QP			
2	294.4259	37.28	-17.96	19.32	46.00	-26.68	QP			
3	357.1923	43.22	-16.02	27.20	46.00	-18.80	QP			

Job No.: ricky 2015 #428

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: RFX Raing system

Mode: TX 2463.5MHz

Model: FX-1001

Manufacturer: China Industries Ltd T/A Wow Stuff

Polarization: Vertical

Power Source: DC 4.5V

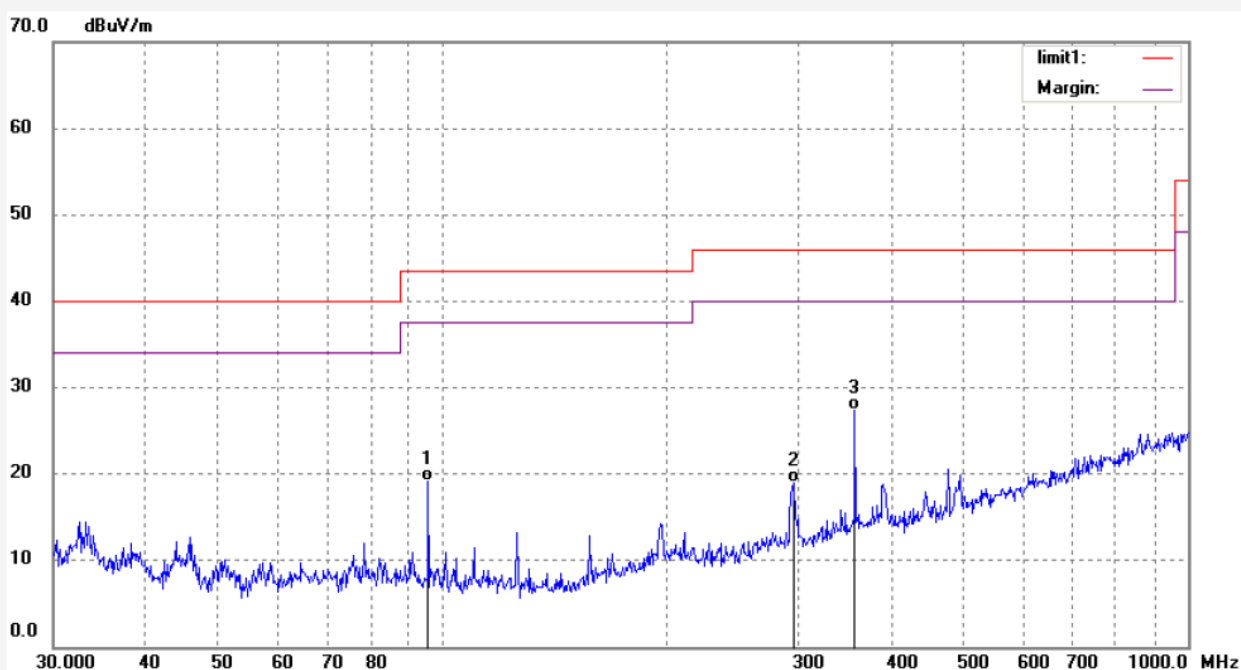
Date: 15/05/09/

Time: 9/49/45

Engineer Signature:

Distance: 3m

Note: Report NO.: ATE20150919



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	95.6484	41.02	-21.94	19.08	43.50	-24.42	QP			
2	295.4623	36.95	-17.94	19.01	46.00	-26.99	QP			
3	357.1923	43.37	-16.02	27.35	46.00	-18.65	QP			

Job No.: ricky 2015 #429

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: RFX Raing system

Mode: TX 2463.5MHz

Model: FX-1001

Manufacturer: China Industries Ltd T/A Wow Stuff

Polarization: Horizontal

Power Source: DC 4.5V

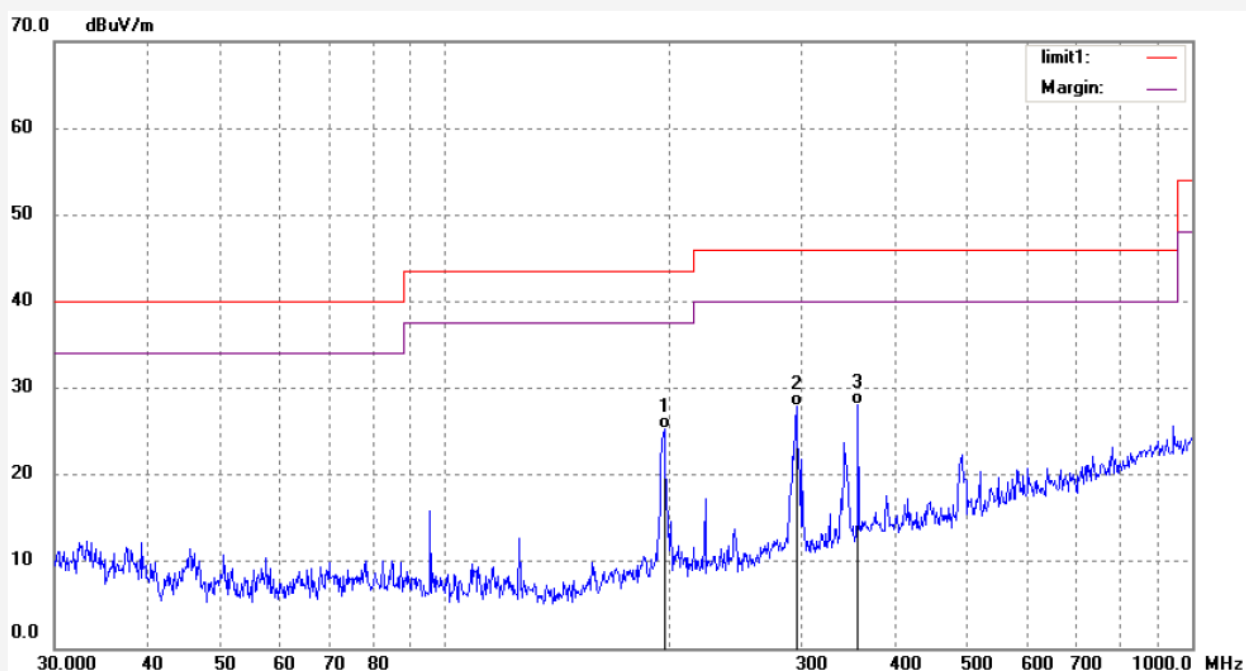
Date: 15/05/09/

Time: 9/50/17

Engineer Signature:

Distance: 3m

Note: Report NO.: ATE20150919



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	196.5595	45.77	-20.42	25.35	43.50	-18.15	QP			
2	295.4623	45.85	-17.94	27.91	46.00	-18.09	QP			
3	357.1923	44.14	-16.02	28.12	46.00	-17.88	QP			

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Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ricky 2015 #366

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: RFX Raing system

Mode: TX 2405MHz

Model: FX-1001

Manufacturer: China Industries Ltd T/A Wow Stuff

Polarization: Vertical

Power Source: DC 4.5V

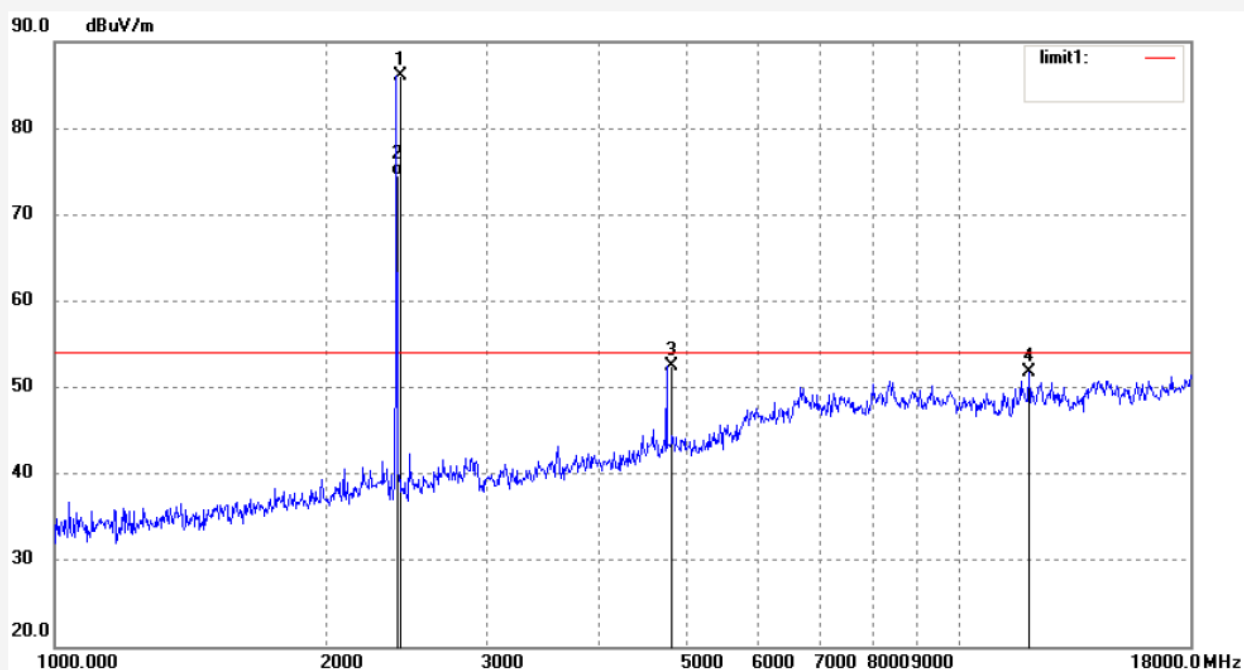
Date: 15/05/08/

Time: 9/07/53

Engineer Signature:

Distance: 3m

Note: Report NO.: ATE20150919



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2405.000	93.62	-7.49	86.13	114.00	-27.87	peak			
2	2405.000	81.95	-7.49	74.46	94.00	-19.54	AVG			
3	4810.000	52.10	0.31	52.41	54.00	-1.59	peak			
4	11940.744	39.41	12.32	51.73	54.00	-2.27	peak			

Job No.: ricky 2015 #367

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: RFX Raing system

Mode: TX 2405MHz

Model: FX-1001

Manufacturer: China Industries Ltd T/A Wow Stuff

Polarization: Horizontal

Power Source: DC 4.5V

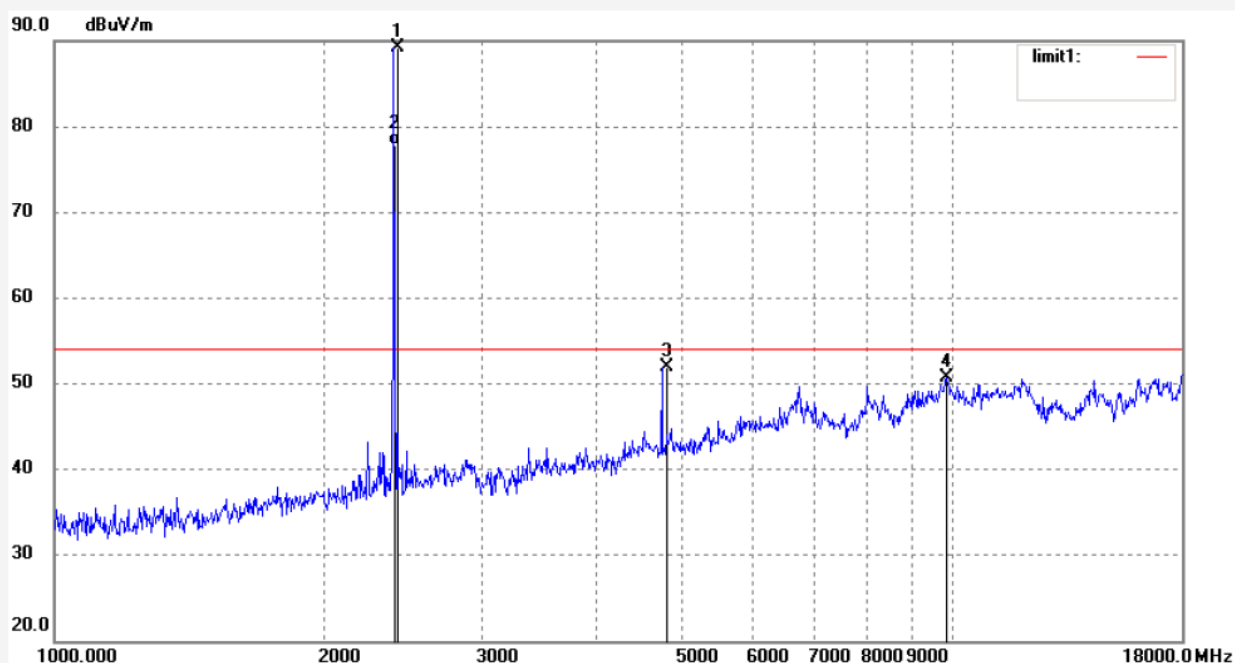
Date: 15/05/08/

Time: 9/10/21

Engineer Signature:

Distance: 3m

Note: Report NO.: ATE20150919



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2405.000	96.65	-7.49	89.16	114.00	-24.84	peak			
2	2405.000	85.34	-7.49	77.85	94.00	-16.15	AVG			
3	4810.000	51.65	0.31	51.96	54.00	-2.04	peak			
4	9853.701	39.76	10.94	50.70	54.00	-3.30	peak			

Job No.: ricky 2015 #364

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: RFX Raing system

Mode: TX 2433.5MHz

Model: FX-1001

Manufacturer: China Industries Ltd T/A Wow Stuff

Polarization: Horizontal

Power Source: DC 4.5V

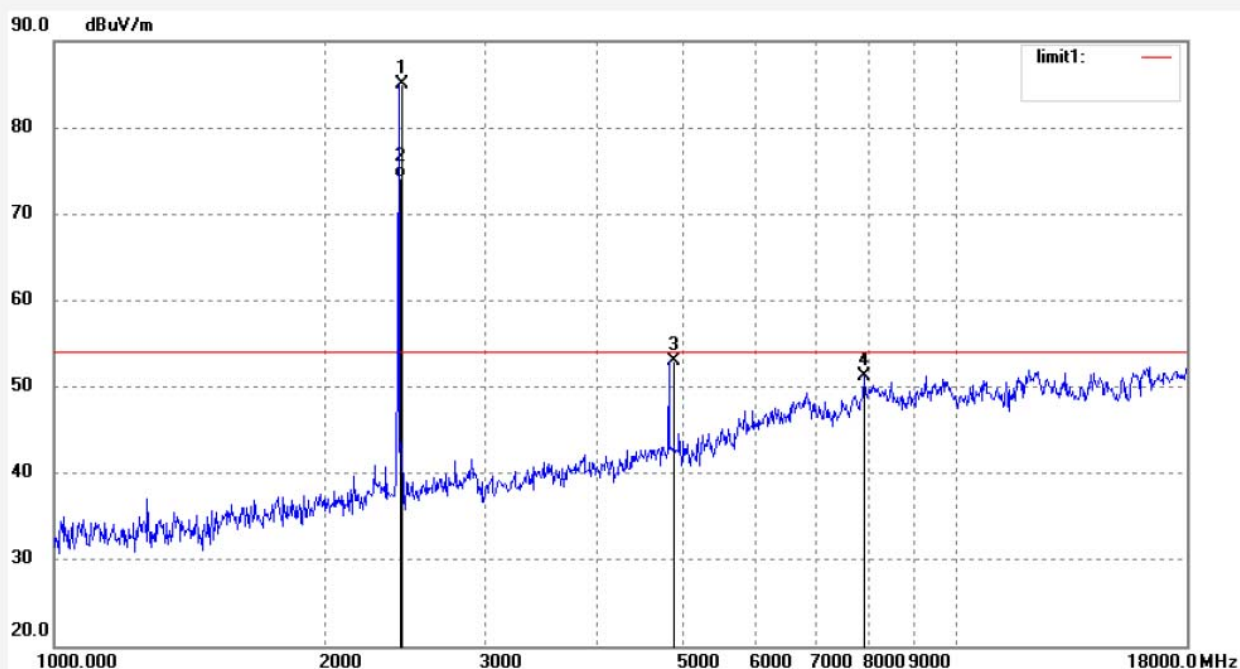
Date: 15/05/08/

Time: 8/56/20

Engineer Signature:

Distance: 3m

Note: Report NO.: ATE20150919



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2433.500	92.40	-7.40	85.00	114.00	-29.00	peak			
2	2433.500	81.56	-7.40	74.16	94.00	-19.84	AVG			
3	4866.000	52.22	0.77	52.99	54.00	-1.01	peak			
4	7898.164	43.85	7.45	51.30	54.00	-2.70	peak			

Job No.: ricky 2015 #365

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: RFX Raing system

Mode: TX 2433.5MHz

Model: FX-1001

Manufacturer: China Industries Ltd T/A Wow Stuff

Polarization: Vertical

Power Source: DC 4.5V

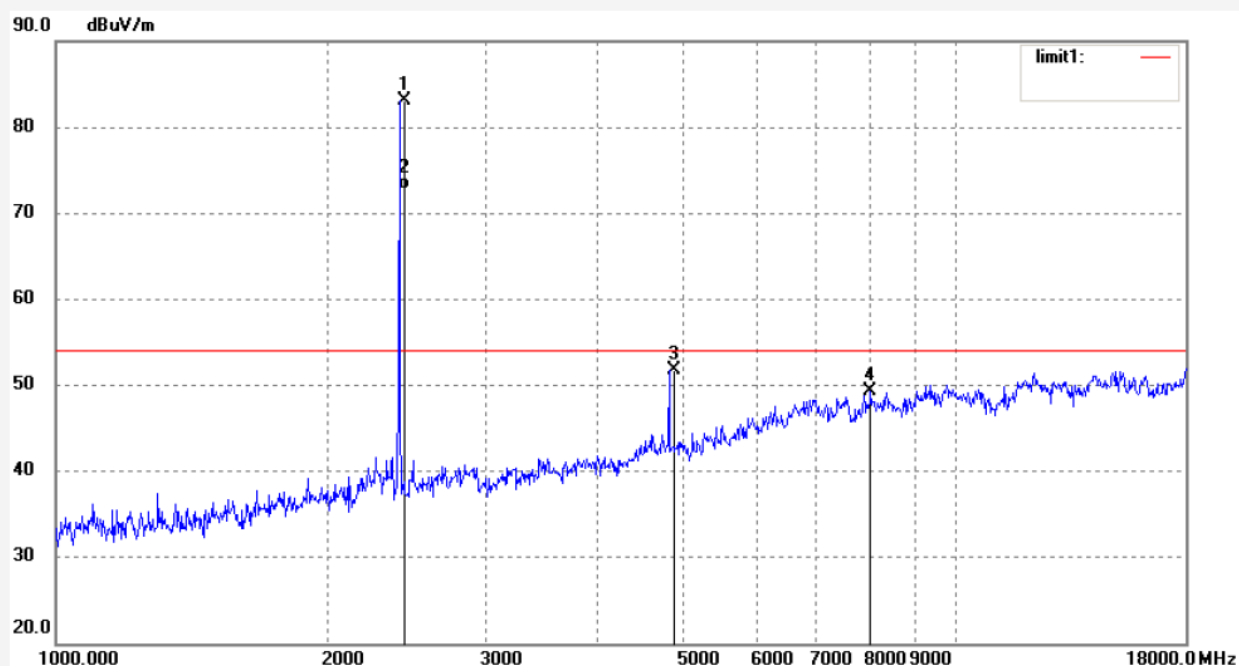
Date: 15/05/08/

Time: 9/00/18

Engineer Signature:

Distance: 3m

Note: Report NO.: ATE20150919



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2433.500	90.52	-7.40	83.12	114.00	-30.88	peak			
2	2433.500	80.21	-7.40	72.81	94.00	-21.19	AVG			
3	4866.000	50.98	0.77	51.75	54.00	-2.25	peak			
4	8037.313	40.96	8.38	49.34	54.00	-4.66	peak			



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Report No.: ATE20150919

Page 32 of 34

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ricky 2015 #368

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: RFX Raing system

Mode: TX 2463.5MHz

Model: FX-1001

Manufacturer: China Industries Ltd T/A Wow Stuff

Polarization: Horizontal

Power Source: DC 4.5V

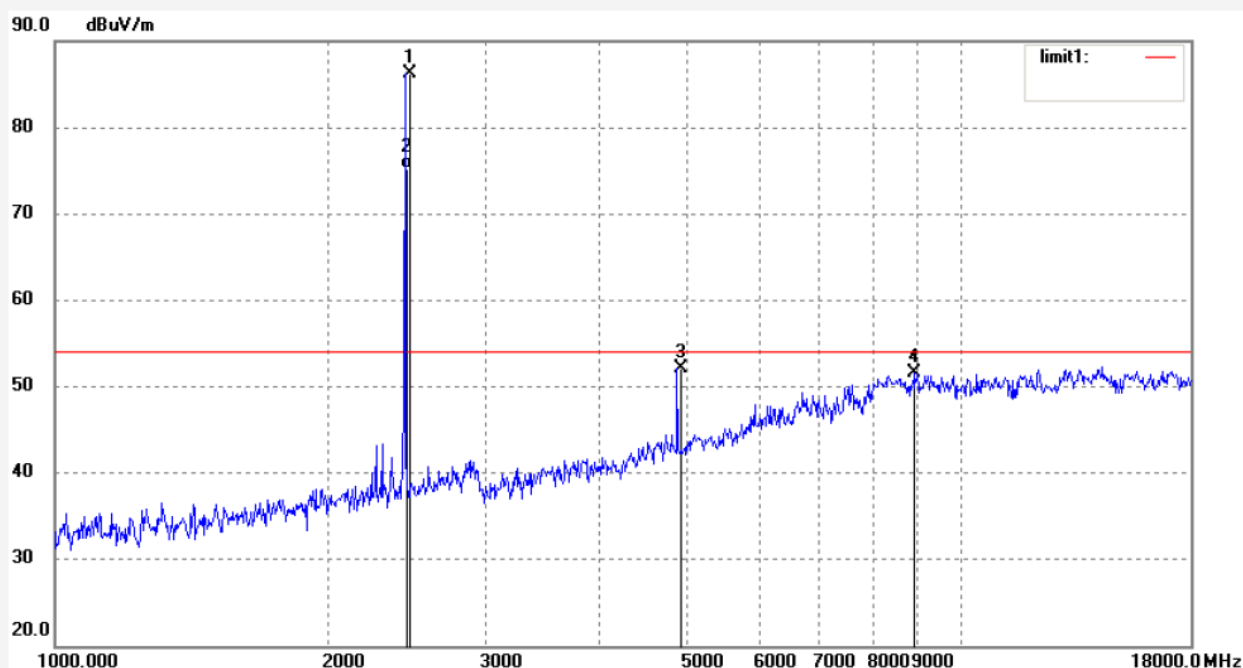
Date: 15/05/08/

Time: 9/12/09

Engineer Signature:

Distance: 3m

Note: Report NO.: ATE20150919



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2463.500	93.66	-7.36	86.30	114.00	-27.70	peak			
2	2463.500	82.65	-7.36	75.29	94.00	-18.71	AVG			
3	4926.000	50.94	1.18	52.12	54.00	-1.88	peak			
4	8925.227	42.67	8.84	51.51	54.00	-2.49	peak			



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Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ricky 2015 #369

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: RFX Raing system

Mode: TX 2463.5MHz

Model: FX-1001

Manufacturer: China Industries Ltd T/A Wow Stuff

Polarization: Vertical

Power Source: DC 4.5V

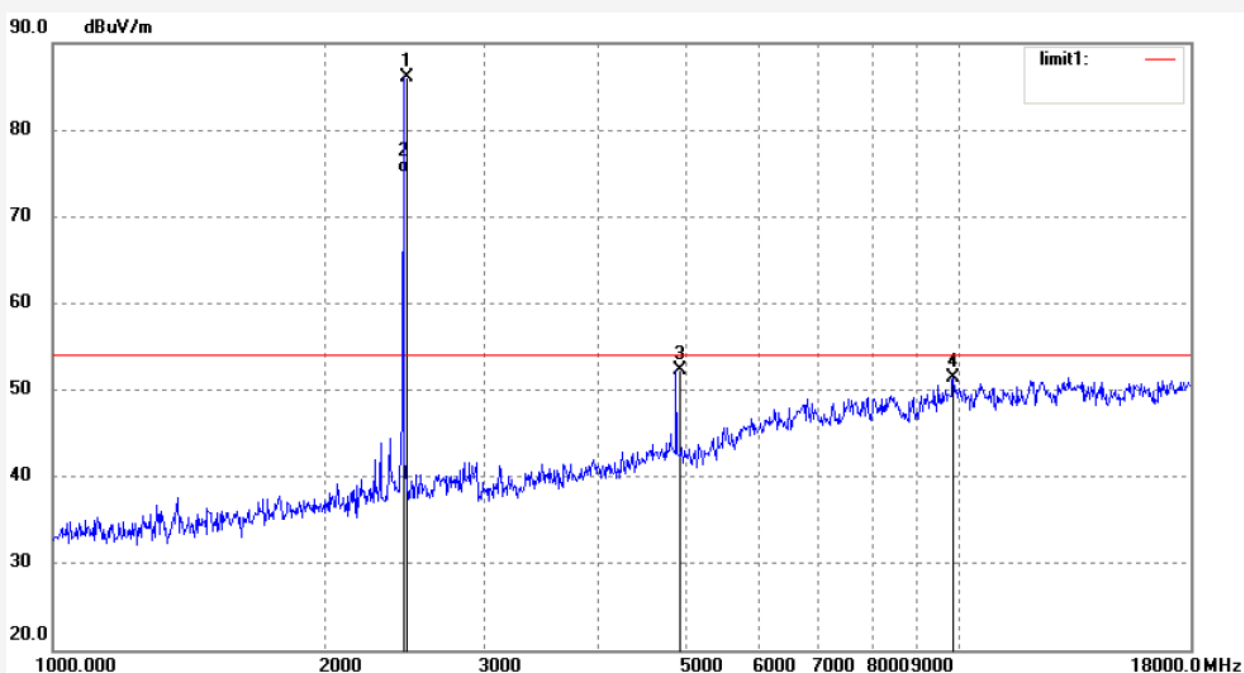
Date: 15/05/08/

Time: 9/14/30

Engineer Signature:

Distance: 3m

Note: Report NO.: ATE20150919



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2463.500	93.49	-7.36	86.13	114.00	-27.87	peak			
2	2463.500	82.45	-7.36	75.09	94.00	-18.91	AVG			
3	4926.000	51.18	1.18	52.36	54.00	-1.64	peak			
4	9853.701	40.47	10.94	51.41	54.00	-2.59	peak			

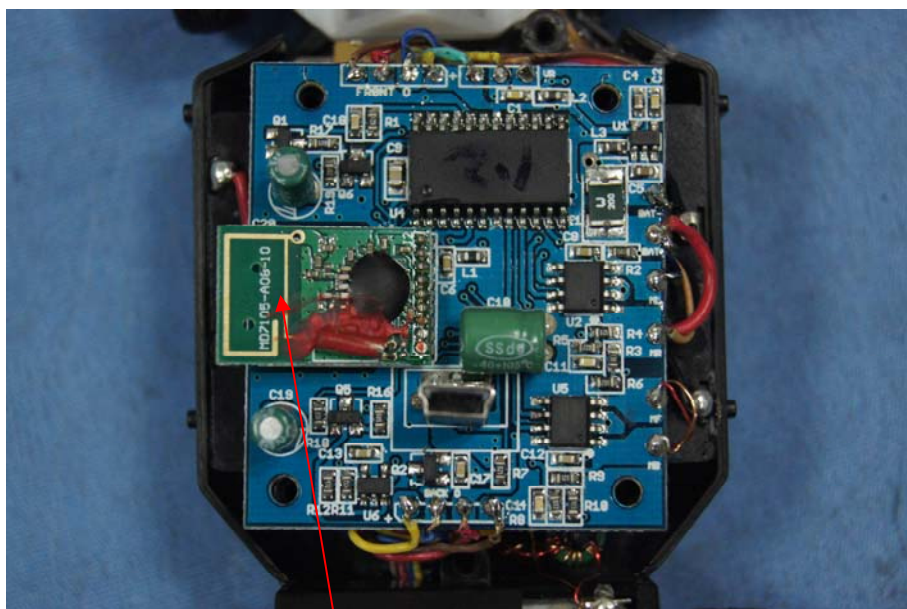
8. ANTENNA REQUIREMENT

8.1.The Requirement

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.

8.2.Antenna Construction

Device is equipped with unique antenna, which isn't displaced by other antenna. Therefore, the equipment complies with the antenna requirement of Section 15.203.



Antenna