

Report No.: ATE20160874

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# APPLICATION CERTIFICATION FCC Part 15C On Behalf of China Industries Ltd T/A Wow! Stuff

Forever Ready Drone Model No.: TX-1029

FCC ID: YCR-TX-1029H

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

Address : F1, Bldg. A, Chan Yuan New Material Port, Keyuan

Rd. Science & Industry Park, Nan Shan, Shenzhen,

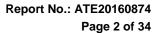
Guangdong P.R. China

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

Report Number: ATE20160874

Date of Test : May 12, 2016--Jun 28, 2016

Date of Report: Jun 29, 2016





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# **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 : Forever Ready Drone

Model No. : TX-1029
Trade Name : TX Juice

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:

Date of Report:

Prepared by:

Approved & Authorized Signer:

May 12, 2016--Jun 28, 2016

Jun 29, 2016

(Tim.zhang, Engineer)



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# 1. GENERAL INFORMATION

#### 1.1.Description of Device (EUT)

EUT Forever Ready Drone

Model Number TX-1029

Power Supply 6V DC (power by battery)

Operate Frequency 2410-2473MHz

Antenna Gain 0dBi

Modulation **GFSK** 

Antenna type Internal Antenna

China Industries Ltd T/A Wow! Stuff Applicant

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: May 12, 2016

Date of Test May 12, 2016--Jun 28, 2016

#### 1.2. Special Accessory and Auxiliary Equipment

N/A



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# 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

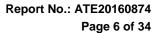
(9kHz-30MHz)

Radiated emission expanded uncertainty = 4.42dB, k=2

(30MHz-1000MHz)

Radiated emission expanded uncertainty = 4.06dB, k=2

(Above 1GHz)

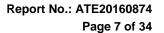




# 2. MEASURING DEVICE AND TEST EQUIPMENT

**Table 1: List of Test and Measurement Equipment** 

Kind of equipment	Manufacturer	Туре	S/N	Calibrated dates	Cal. Interval
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 09, 2016	One Year
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 09, 2016	One Year
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 09, 2016	One Year
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 09, 2016	One Year
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 14, 2016	One Year
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 14, 2016	One Year
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 14, 2016	One Year
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1067	Jan. 14, 2016	One Year
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 09, 2016	One Year
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 09, 2016	One Year
Highpass Filter	Wainwright Instruments	WHKX3.6/18 G-10SS	N/A	Jan. 09, 2016	One Year
Band Reject Filter	Wainwright Instruments	WRCG2400/2 485-2375/2510 -60/11SS	N/A	Jan. 09, 2016	One Year





# 3. OPERATION OF EUT DURING TESTING

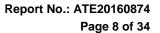
# 3.1. Carrier Frequency of Channels

Channel	Frequeeny (MHz)	Channel	Frequeeny (MHz)	Channel	Frequeeny (MHz)	Channe 1	Frequeeny (MHz)
1	2410	4	2429	7	2451	10	2473
2	2417	5	2437	8	2459		
3	2423	6	2442	9	2461		

# 3.2.Configuration and peripherals

EUT

Figure 1 Setup: Transmitting mode





4. TEST PROCEDURES AND RESULTS

FCC Rules	<b>Description of Test</b>	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		

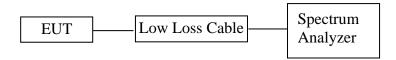
Note: The power supply mode of the EUT is DC 6V, According to the FCC standard requirements, conducted emission is not applicable.

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#### 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 2410, 2442, 2473MHz.

#### 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

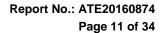
Channel	Frequency(MHz)	20 dB Bandwidth(MHz)
Low	2410	1.610
Middle	2442	1.210
High	2473	1.480

The spectrum analyzer plots are attached as below.

#### Low channel

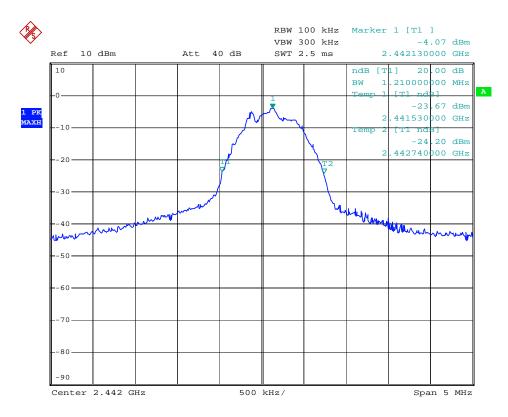


Date: 12.JUN.2016 16:42:15



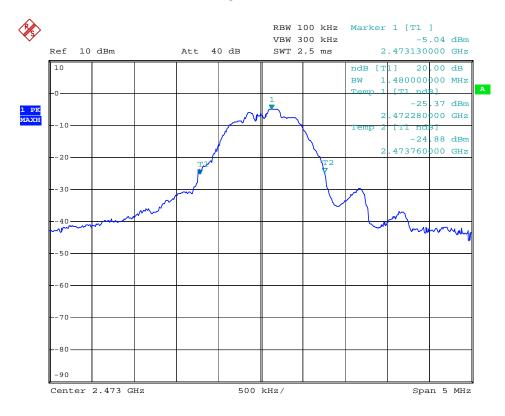


#### Middle channel



Date: 12.JUN.2016 16:43:57

#### High channel



Date: 12.JUN.2016 16:47:13

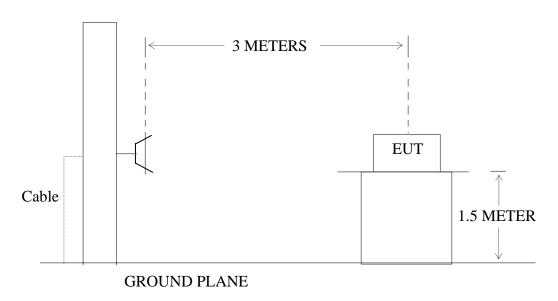


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#### 6. BAND EDGE COMPLIANCE TEST

#### 6.1.Block Diagram of Test Setup

#### ANTENNA ELEVATION VARIES FROM 1 TO 4 METERS



# 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.



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#### 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 2410, 2473MHz..

#### 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:

6.5.5. The band edges was measured and recorded.

#### 6.6.Test Result

#### 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.



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Job No.: STAR2016 #832 Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 % EUT: Forever Ready Drone

Mode: TX 2473MHz Model: TX-1029

Manufacturer: China Industries Ltd T/A Wow! Stuff

Note: Report No.:ATE20160874

Polarization: Horizontal Power Source: DC 6V

Date: 16/05/12/ Time: 15/57/16

Engineer Signature: star

Distance: 3m

				limit1: —
90		]		limit2: —
80				
70		1		
60		3	:	
50		3/10/14/10	14.1.5	
40	MANAGE 11. 191 - 11			MM million representation of the manufacture of the second
30			tilla hali seet.	11. L. B. B. MITTONIA . PRINCE TO SERVICE AND
20				
10.0				

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	60.43	-7.37	53.06	74.00	-20.94	peak			
2	2483.500	52.00	-7.37	44.63	54.00	-9.37	peak			
3	2486.399	66.92	-7.37	59.55	74.00	-14.45	peak			
4	2486.399	57.39	-7.37	50.02	54.00	-3.98	peak			
5	2500.000	51.75	-7.32	44.43	74.00	-29.57	peak			
6	2500.000	42.67	-7.32	35.35	54.00	-18.65	peak			
7	2522.419	64.25	-7.26	56.99	74.00	-17.01	peak			
8	2522.419	55.54	-7.26	48.28	54.00	-5.72	peak			



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Fax:+86-0755-26503396

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Job No.: STAR2016 #831 Standard: FCC PK

Test item: Radiation Test
Temp.( C)/Hum.(%) 25 C / 55 %
EUT: Forever Ready Drone

Mode: TX 2473MHz Model: TX-1029

Manufacturer: China Industries Ltd T/A Wow! Stuff

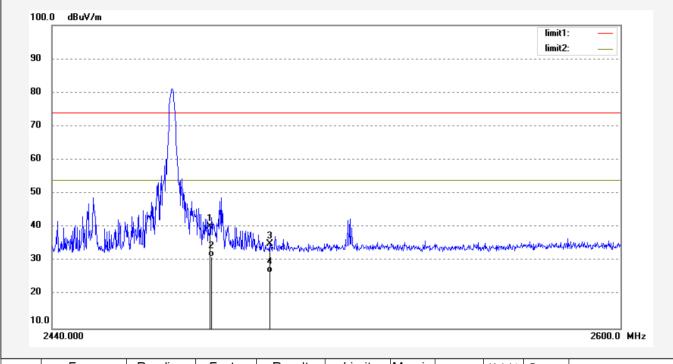
Note: Report No.:ATE20160874

Polarization: Vertical Power Source: DC 6V

Date: 16/05/12/ Time: 15/54/15

Engineer Signature: star

Distance: 3m



Freq. Reading Factor Result Limit Margin Height Degree Detector No. Remark (cm) (deg.) (dBuV/m) (MHz) (dBuV/m) (dB) (dBuV/m) (dB) 47.57 -7.37 40.20 74.00 1 2483.500 -33.80 peak 2 2483.500 38.60 -7.37 31.23 54.00 -22.77 peak 3 2500.000 42.45 -7.32 35.13 74.00 -38.87 peak 4 2500.000 33.92 -7.32 26.60 54.00 -27.40peak



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Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Report No.: ATE20160874

Job No.: STAR2016 #829 Polarization: Horizontal Standard: FCC PK Power Source: DC 6V Test item: Radiation Test Date: 16/05/12/

Date: 16/05/12/ Time: 15/47/58

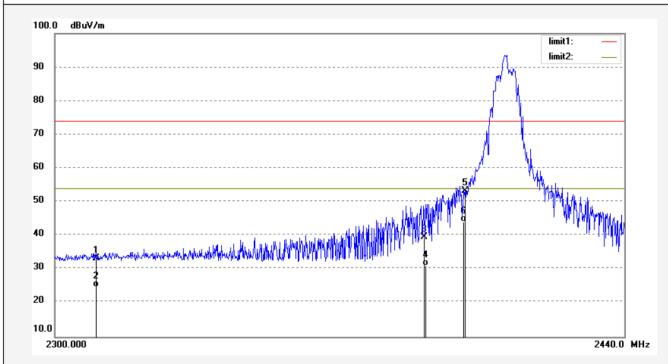
EUT: Forever Ready Drone Engineer Signature: star

Mode: TX 2410MHz Distance: 3m Model: TX-1029

Manufacturer: China Industries Ltd T/A Wow! Stuff

Note: Report No.:ATE20160874

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



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	41.07	-7.87	33.20	74.00	-40.80	peak			
2	2310.000	32.69	-7.87	24.82	54.00	-29.18	peak			
3	2390.000	47.25	-7.64	39.61	74.00	-34.39	peak			
4	2390.000	38.70	-7.64	31.06	54.00	-22.94	peak			
5	2400.000	60.89	-7.61	53.28	74.00	-20.72	peak			
6	2400.000	51.67	-7.61	44.06	54.00	-9.94	peak			



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Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Report No.: ATE20160874

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Job No.: STAR2016 #830 Polarization: Vertical Standard: FCC PK Power Source: DC 6V

Date: 16/05/12/

Time: 15/51/04

Engineer Signature: star

Distance: 3m

Test item: Radiation Test

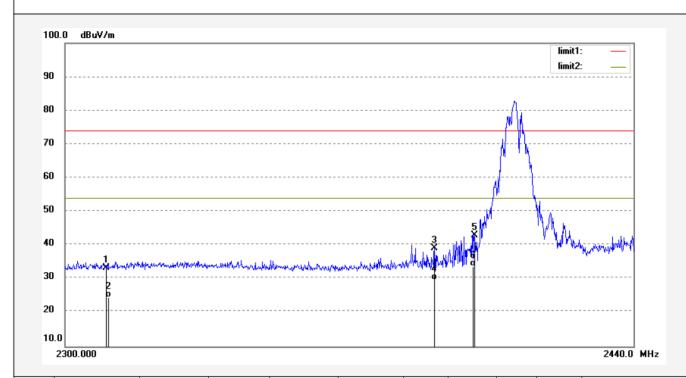
EUT: Forever Ready Drone Mode: TX 2410MHz

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

Model: TX-1029

Manufacturer: China Industries Ltd T/A Wow! Stuff

Report No.:ATE20160874 Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	41.16	-7.87	33.29	74.00	-40.71	peak			
2	2310.000	32.47	-7.87	24.60	54.00	-29.40	peak			
3	2390.000	46.75	-7.64	39.11	74.00	-34.89	peak			
4	2390.000	37.29	-7.64	29.65	54.00	-24.35	peak			
5	2400.000	50.68	-7.61	43.07	74.00	-30.93	peak			
6	2400.000	41.36	-7.61	33.75	54.00	-20.25	peak			



# 7. RADIATED SPURIOUS EMISSION TEST

# 7.1.Block Diagram of Test Setup

7.1.1.Block diagram of connection between the EUT and peripherals

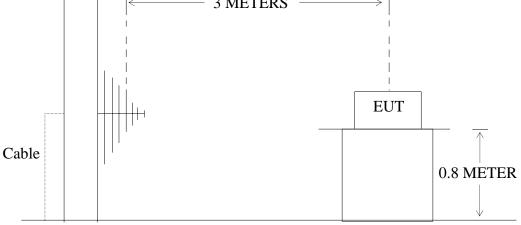


Setup: Transmitting mode

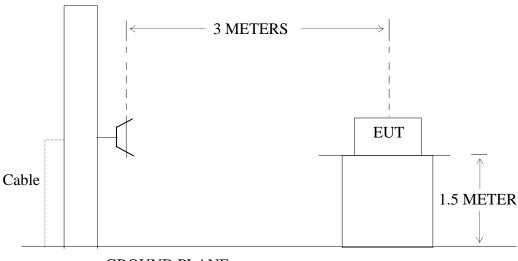
(EUT: Forever Ready Drone)

#### 7.1.2.Semi-Anechoic Chamber Test Setup Diagram





**GROUND PLANE** 



**GROUND PLANE** 



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#### 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
<sup>1</sup> 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			

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

(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 Section15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

<sup>&</sup>lt;sup>2</sup>Above 38.6



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#### 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 2410, 2442, 2473MHz.

#### 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



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# 7.7. The Field Strength of Radiation Emission Measurement Results **PASS.**

#### **Fundamental Radiated Emissions**

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	
2410	78.10	87.97	-7.64	70.46	80.27	94.00	114.00	23.54	33.73	Vertical
2410	90.10	98.34	-7.64	82.46	90.70	94.00	114.00	11.54	23.30	Horizontal
2442	79.14	87.79	-7.56	71.58	80.23	94.00	114.00	22.42	33.77	Vertical
2442	90.78	99.58	-7.56	83.22	92.02	94.00	114.00	10.78	21.98	Horizontal
2473	77.61	86.17	-7.49	70.12	78.68	94.00	114.00	23.88	35.32	Vertical
2473	90.45	99.57	-7.49	82.96	92.08	94.00	114.00	11.04	21.92	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



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

Page 22 of 34 Site: 1# Chamber

Report No.: ATE20160874

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

star

Distance: 3m

Job No.: star2016 #817 Polarization: Horizontal Standard: FCC Class B 3M Radiated Power Source: DC 6V

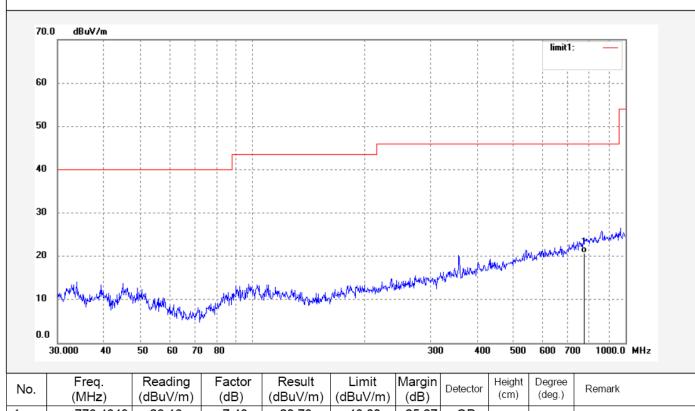
Test item: Radiation Test Date: 16/05/12/ Temp.( C)/Hum.(%) 25 C / 55 % Time: 15/19/58

EUT: Forever Ready Drone Engineer Signature:

Mode: TX 2410MHz Model: TX-1029

Manufacturer: China Industries Ltd T/A Wow! Stuff

Report No.:ATE20160874 Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	776.4849	28.16	-7.43	20.73	46.00	-25.27	QP			



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Report No.: ATE20160874

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Job No.: star2016 #818

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 % EUT: Forever Ready Drone

Mode: TX 2410MHz Model: TX-1029

Manufacturer: China Industries Ltd T/A Wow! Stuff

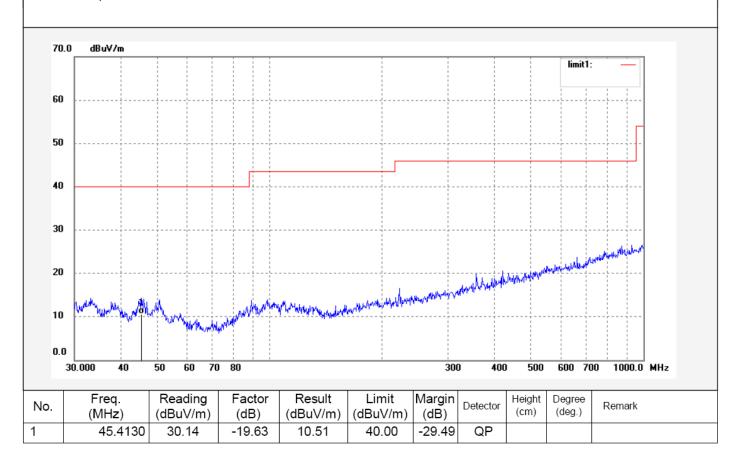
Note: Report No.:ATE20160874

Polarization: Vertical Power Source: DC 6V

Date: 16/05/12/ Time: 15/22/34

Engineer Signature: star

Distance: 3m





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Page 24 of 34

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Report No.: ATE20160874

Polarization: Horizontal Power Source: DC 6V

> Date: 16/05/12/ Time: 15/24/30

Engineer Signature: star

Distance: 3m

Job No.: star2016 #820

Standard: FCC Class B 3M Radiated

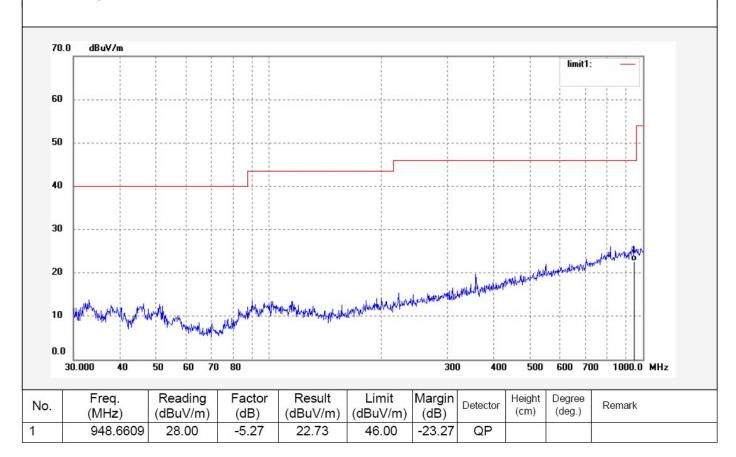
Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 % EUT: Forever Ready Drone

Mode: TX 2442MHz Model: TX-1029

Manufacturer: China Industries Ltd T/A Wow! Stuff

Note: Report No.:ATE20160874





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Report No.: ATE20160874

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Job No.: star2016 #819

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 % EUT: Forever Ready Drone

Mode: TX 2442MHz Model: TX-1029

Manufacturer: China Industries Ltd T/A Wow! Stuff

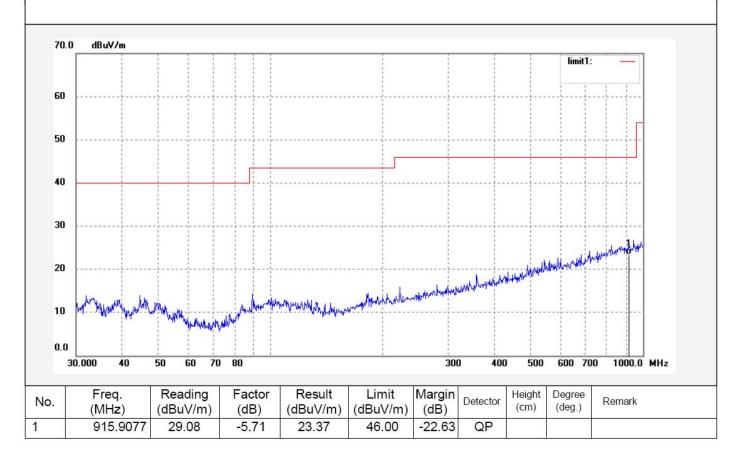
Note: Report No.:ATE20160874

Polarization: Vertical Power Source: DC 6V

Date: 16/05/12/ Time: 15/23/45

Engineer Signature: star

Distance: 3m







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Report No.: ATE20160874

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Job No.: star2016 #821 Polarization: Horizontal Standard: FCC Class B 3M Radiated Power Source: DC 6V

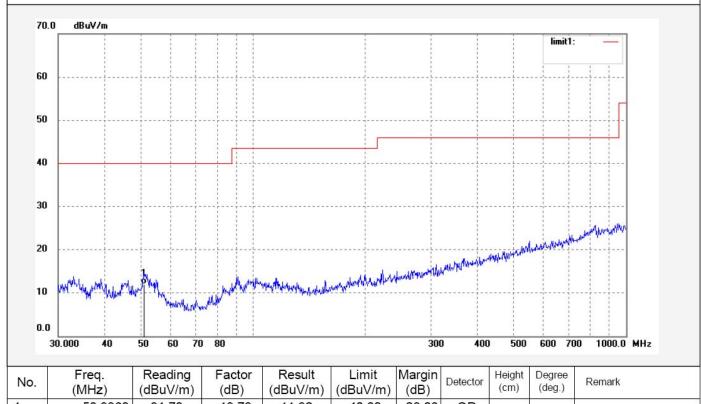
Test item: Radiation Test Date: 16/05/12/
Temp.( C)/Hum.(%) 25 C / 55 % Time: 15/24/49

EUT: Forever Ready Drone Engineer Signature: star
Mode: TX 2473MHz Distance: 3m

Mode: TX 2473MHz
Model: TX-1029

Manufacturer: China Industries Ltd T/A Wow! Stuff

Note: Report No.:ATE20160874





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Page 27 of 34 Site: 1# Chamber Tel:+86-0755-26503290

Fax:+86-0755-26503396

Report No.: ATE20160874

Polarization: Vertical Power Source: DC 6V

> Date: 16/05/12/ Time: 15/26/43

Engineer Signature: star

Distance: 3m

Job No.: star2016 #822

Standard: FCC Class B 3M Radiated

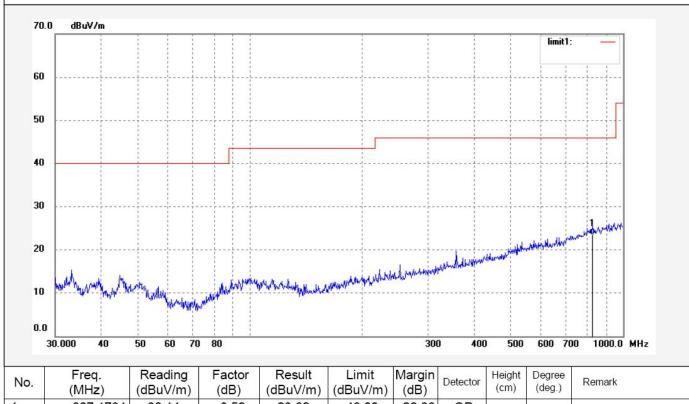
Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 % EUT: Forever Ready Drone

Mode: TX 2473MHz Model: TX-1029

Manufacturer: China Industries Ltd T/A Wow! Stuff

Report No.:ATE20160874 Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	827.1794	30.14	-6.52	23.62	46.00	-22.38	QP				



Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Report No.: ATE20160874

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

Polarization: Horizontal
Power Source: DC 6V

Date: 16/05/12/ Time: 15/33/38

Engineer Signature: star

Distance: 3m

Job No.: STAR2016 #824

Standard: FCC Class B 3M Radiated

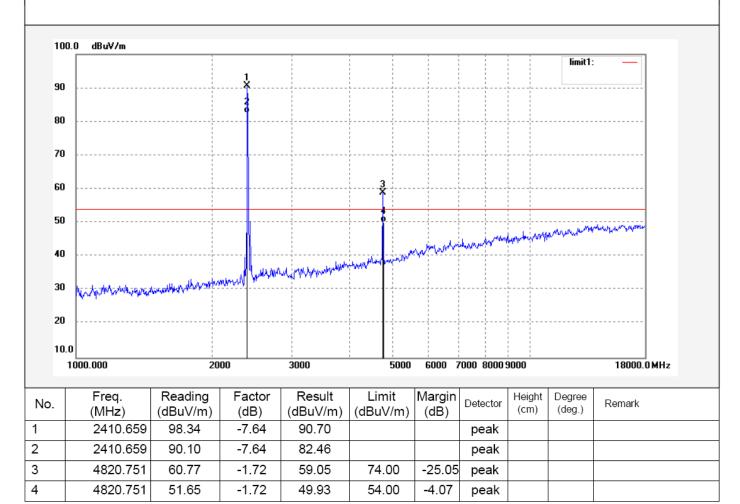
Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 % EUT: Forever Ready Drone

Mode: TX 2410MHz Model: TX-1029

Manufacturer: China Industries Ltd T/A Wow! Stuff

Note: Report No.:ATE20160874





Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Report No.: ATE20160874

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

Job No.: STAR2016 #823 Polarization: Vertical Standard: FCC Class B 3M Radiated Power Source: DC 6V

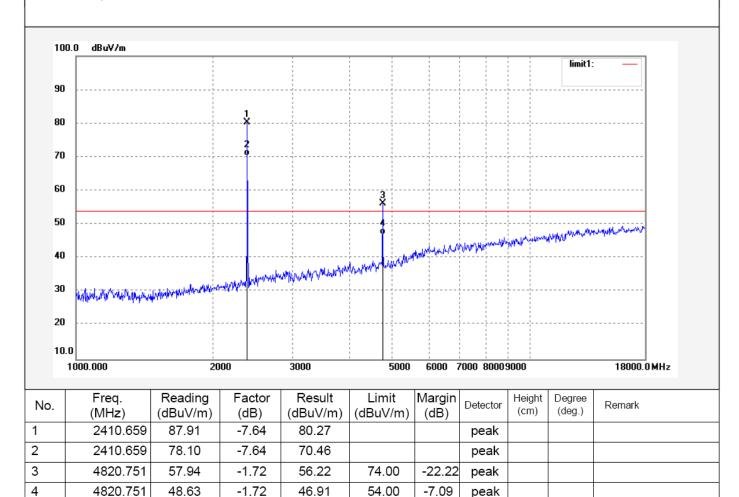
Test item: Radiation Test Date: 16/05/12/
Temp.( C)/Hum.(%) 25 C / 55 % Time: 15/31/00

EUT: Forever Ready Drone Engineer Signature: star

Mode: TX 2410MHz Distance: 3m Model: TX-1029

Manufacturer: China Industries Ltd T/A Wow! Stuff

Note: Report No.:ATE20160874





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

Distance: 3m

Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: STAR2016 #825 Polarization: Horizontal Standard: FCC Class B 3M Radiated Power Source: DC 6V

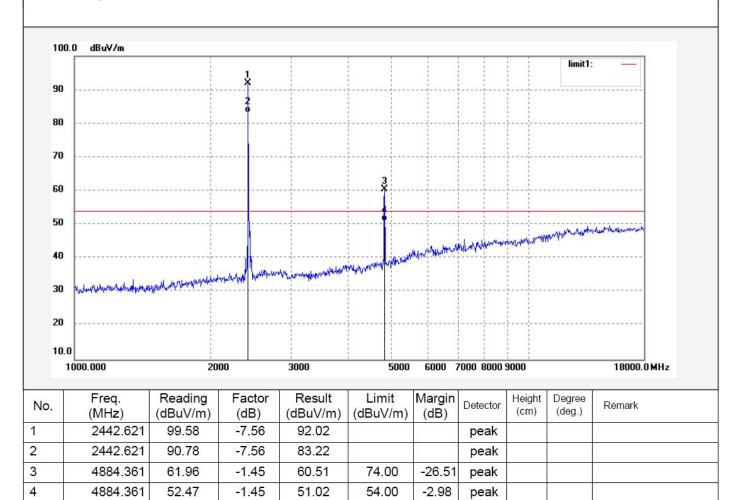
Test item: Radiation Test Date: 16/05/12/
Temp.( C)/Hum.(%) 25 C / 55 % Time: 15/38/43

EUT: Forever Ready Drone Engineer Signature: s

Mode: TX 2442MHz
Model: TX-1029

Manufacturer: China Industries Ltd T/A Wow! Stuff

Note: Report No.:ATE20160874





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Report No.: ATE20160874

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Job No.: STAR2016 #826 Polarization: Vertical Standard: FCC Class B 3M Radiated Power Source: DC 6V

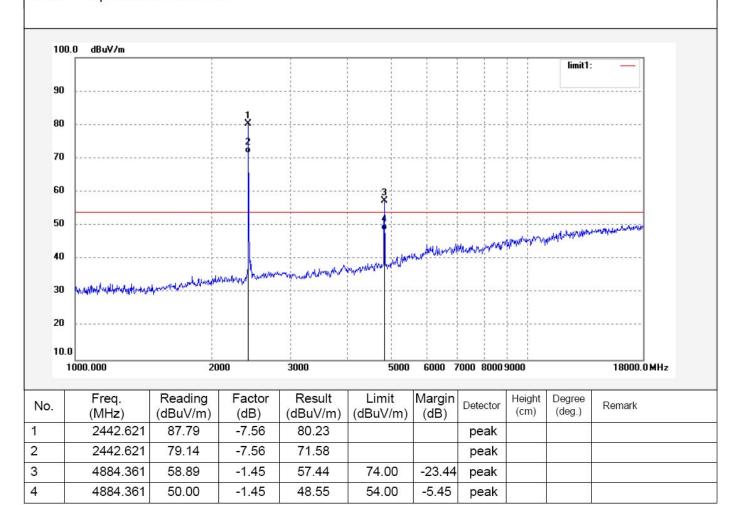
Test item: Radiation Test Date: 16/05/12/
Temp.( C)/Hum.(%) 25 C / 55 % Time: 15/40/35

EUT: Forever Ready Drone Engineer Signature: star

Mode: TX 2442MHz Distance: 3m Model: TX-1029

Manufacturer: China Industries Ltd T/A Wow! Stuff

Note: Report No.:ATE20160874





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

Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: STAR2016 #828 Polarization:

Power Source: DC 6V

Horizontal

Date: 16/05/12/ Time: 15/43/56

Engineer Signature: star

Distance: 3m

Standard: FCC Class B 3M Radiated

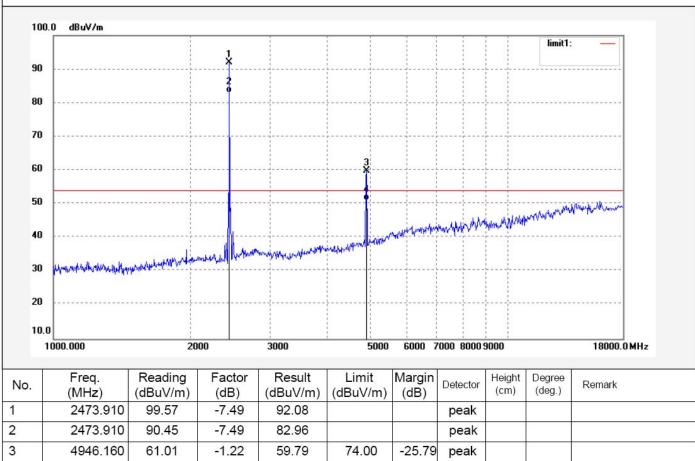
Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 % EUT: Forever Ready Drone

Mode: TX 2473MHz Model: TX-1029

Manufacturer: China Industries Ltd T/A Wow! Stuff

Note: Report No.:ATE20160874



4 4946.160 52.28 -1.2251.06 54.00 -2.94 peak



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F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: STAR2016 #827

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 % EUT: Forever Ready Drone

Mode: TX 2473MHz

Model: TX-1029

Manufacturer: China Industries Ltd T/A Wow! Stuff

Note: Report No.:ATE20160874

Polarization: Vertical Power Source: DC 6V

Date: 16/05/12/ Time: 15/42/53

Engineer Signature: star

Distance: 3m

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-5.36

peak

Note: Average measurement with peak detection at No.2&4

-1.22

48.64

49.86

4

4946.160



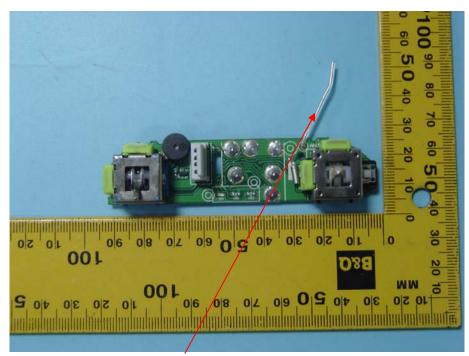
# 8. ANTENNA REQUIREMENT

#### 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 permanent attached antenna, which isn't displaced by other antenna. The Antenna gain of EUT is 0dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203.



Antenna