

# Test Report

No.: AJT221027032E-1

Applicant Name : XIAO YE TOYS FACTORY  
Applicant Address : NO.53, FENGXIANG ROAD, FENGXIANG STREET, CHENGHAI DISTRICT, SHANTOU CITY  
Manufacturer : XIAO YE TOYS FACTORY  
Manufacturer Address : NO.53, FENGXIANG ROAD, FENGXIANG STREET, CHENGHAI DISTRICT, SHANTOU CITY

The following samples were submitted and identified by/on behalf of the client as:

Sample Description : R/C CAR  
Model No. : G2065  
Additional Model : SG-1204, G2063, G2060-1, G2060-2, G2061  
Sample Received Date : 27 Oct, 2022  
Testing Completed Date : 04 Jan, 2023

Tests conducted: For compliance with application, refer to attached page(s) for details.

Assess standard used:	Conclusion
FCC Part 15, Subpart C, Section 15.249 & ANSI C63.10-2013	PASS

Tested by: Glory

Reviewed by: Ely Liang

Approved by: Barbara Jiang

Position: Technical Supervisor  
Date: 2023-01-06



This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: www.ajtesting.com Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1

## TABLE OF CONTENTS

1 Test Standards .....	3
2 Summary .....	3
2.1 General Remarks.....	3
2.2 Final Assessment .....	3
3 Equipment Under Test.....	3
3.1 Short description of the Equipment Under Test (EUT) .....	3
3.2 EUT Configuration .....	4
3.3 Description of Test Modes .....	4
4 Test Environment.....	5
4.1 Address of the test Laboratory .....	5
4.2 Test Facility.....	5
4.3 Environmental Conditions.....	5
4.4 Statement of the Measurement Uncertainty .....	6
4.5 Test Types and Results .....	6
5 Test Conditions and Results.....	6
5.1 Radiated Emission (RE) .....	6
5.2 20dB Bandwidth.....	19
5.3 Conducted Emission (CE) .....	22
5.4 Antenna Requirements .....	23
6 Test Equipment.....	24
7 Test Photographs .....	25
8 Photos of the EUT .....	25
9 Manufacturer/ Approval Holder Declaration .....	25

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1

## 1 Test Standards

The tests were performed according to following standards:
FCC Part 15, Subpart C, Section 15.249: Operation within the bands 902-928 MHz, 2400-2483.5 MHz, 5725-5875 MHz, and 24.0-24.25 GHz
ANSI C63.10-2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

## 2 Summary

### 2.1 General Remarks

Date of receipt of test sample	27 Oct, 2022
Testing commenced on	27 Oct, 2022 ---- 04 Jan, 2023
Testing concluded on	04 Jan, 2023

### 2.2 Final Assessment

Test Content:	Assessment
The RF requirements pertaining to the technical standards and tested operation modes are	Fulfilled
The equipment under test	Fulfilled the RF requirements

## 3 Equipment Under Test

### 3.1 Short description of the Equipment Under Test (EUT)

EUT Name	R/C CAR
Model No.	G2065
FCC ID	2A9WF-G2065
Number of Tested Samples	1
Power Supply Voltage	DC: 4.5V(AA*3)
Operating Mode	TX Mode
Operation Frequency	2412-2472MHz
Number of Channel	61
Modulation	GFSK
Antenna Type	WHIP Antenna
Antenna Gain	0dBi
NOTE:	
	1. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual. The laboratory is not responsible for the accuracy of the information provided by manufacturer.

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1

## 3.2 EUT Configuration

(The CDF filled by the applicant can be viewed at the test laboratory.)

The following peripheral devices and interface cables were connected during the measurement:  
Not Applicable



## 3.3 Description of Test Modes

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and packet type. The worst case was found when the EUT was positioned on Y axis for radiated emission. The EUT was tested under the following mode.

EUT Configure Mode	Applicable to				Description	
	RE < 1G	RE ≥ 1G	PLC	BW	DC 4.5V(AA*3)	
A	√	√	N/A	√		

Where RE<1G: Radiated Emission below 1GHz  
PLC: Power Line Conducted Emission

RE≥1G: Radiated Emission above 1GHz  
BW: 20dB bandwidth

Following channel(s) was (were) selected for the test as listed below.

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	<b>2412</b>	18	2429	35	2446	52	2463
2	2413	19	2430	36	2447	53	2464
3	2414	20	2431	37	2448	54	2465
4	2415	21	2432	38	2449	55	2466
5	2416	22	2433	39	2450	56	2467
6	2417	23	2434	40	2451	57	2468
7	2418	24	2435	41	2452	58	2469
8	2419	25	2436	42	2453	59	2470
9	2420	26	2437	43	2454	60	2471
10	2421	27	2438	44	2455	<b>61</b>	<b>2472</b>
11	2422	28	2439	45	2456		
12	2423	29	2440	46	2457		
13	2424	30	2441	47	2458		
14	2425	<b>31</b>	<b>2442</b>	48	2459		
15	2426	32	2443	49	2460		
16	2427	33	2444	50	2461		
17	2428	34	2445	51	2462		

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1

## Channel List

Channel	Frequency (MHz)
The lowest channel	2412
The middle channel	2442
The highest channel	2472

Note: The more detailed channel, please refer to the product specifications

## 4 Test Environment

### 4.1 Address of the test Laboratory

Test Laboratory:	AJT Testing Services Limited
Test Site:	1-2/F., NO.1, WENHUA SOUTH ROAD, CHENGHUA INDUSTRIAL ZONE, CHENGHAI DISTRICT, SHANTOU, GUANGDONG, CHINA
Tel:	86-754-85860999
Fax:	86-754-86984098

### 4.2 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:	
CNAS Accreditation NO.:	L4735
A2LA Accreditation NO.:	5443.01
Designation Number:	CN1263
Test Firm Registration Number:	127385
Industry Canada Site Registration Number:	25345
FCC Registration NO.:	0028094555

### 4.3 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:	
Temperature	15~35°C
Humidity	30~75%

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1

## 4.4 Statement of the Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. Furthermore, component and process variability of devices are similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Measurement Uncertainty (Standard: ETSI TR 100 028)	
Conducted Emission (CE)	±2.14dB
Radiated Emission below 1GHz	±4.44dB
Radiated Emission above 1GHz	±5.26dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

## 4.5 Test Types and Results

Standard: FCC PART 15, SUBPART C (SECTION 15.249)		
Standard section	Test Type	Result
§15.209 & §15.249(a)	Radiated Emission (RE)	PASS
§15.215(c)	20dB Bandwidth	PASS
§15.207(a)	Conducted Emission (CE)	N/A
§15.203	Antenna Requirement	PASS
§15.205	Restricted Band Around Fundamental Frequency	PASS

## 5 Test Conditions and Results

### 5.1 Radiated Emission (RE)

For test instruments and accessories used see section 6

#### 5.1.1 Test Procedures

- (1) The EUT was placed on the top of a rotating table 1.5 meters (above 1GHz) and 0.8 meters (below 1GHz) above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- (2) The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- (3) The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- (4) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

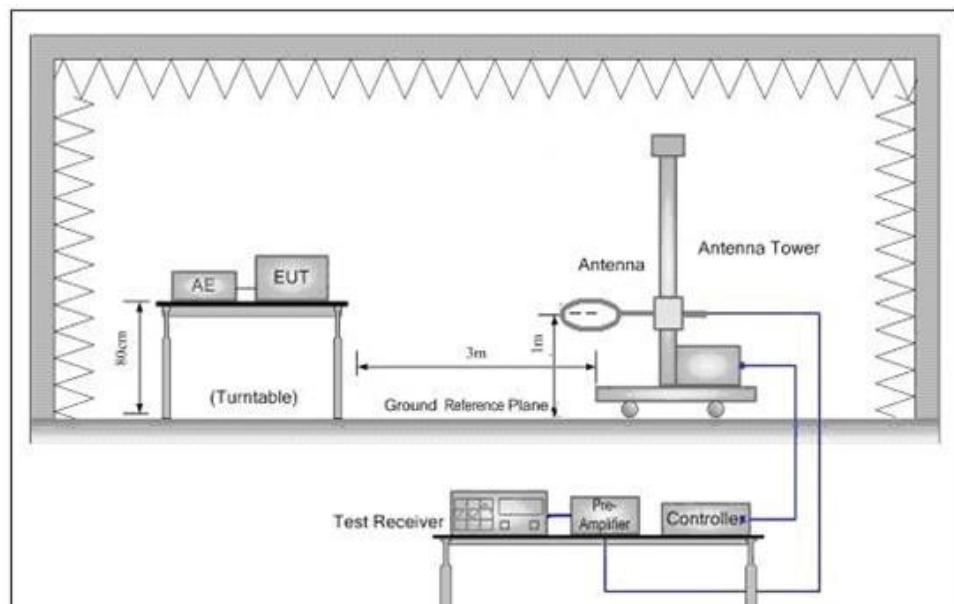
No.: AJT221027032E-1

- (5) The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- (6) For below 30MHz, a loop antenna with its vertical plane is place 3m from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. And the centre of the loop shall be 1m above the ground.
- (7) If the emission level of the EUT in peak mode was lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. All modes of operation were investigated and the worst-case emissions are reported
4. The testing of the EUT was performed on all 3 orthogonal axes; the worst-case test configuration was reported on the file test setup photo.

## 5.1.2 Test Setup



Below 30MHz

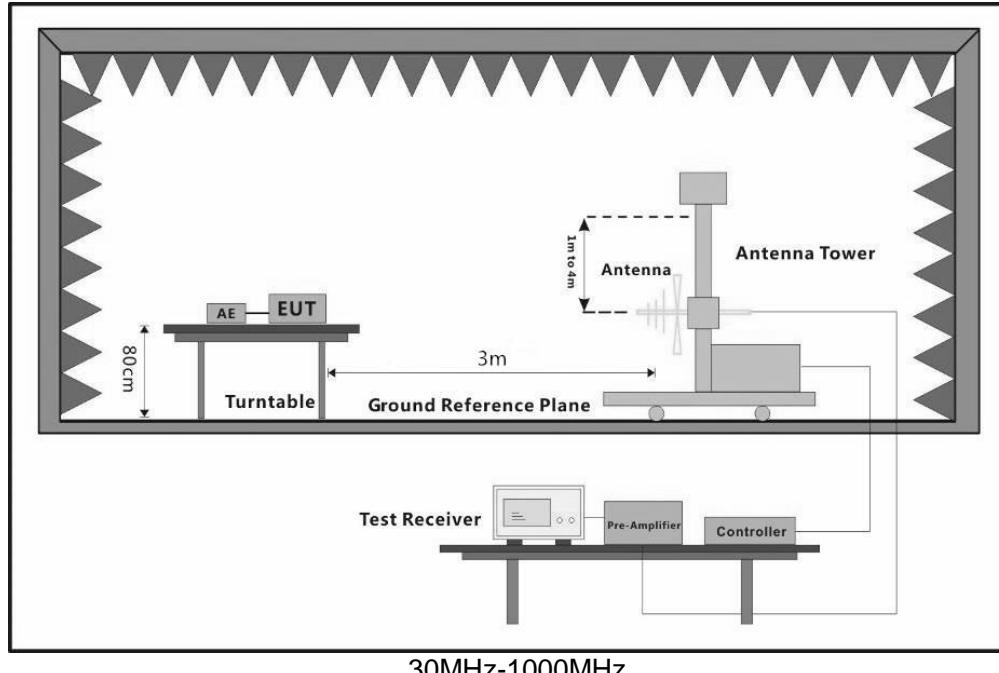
This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

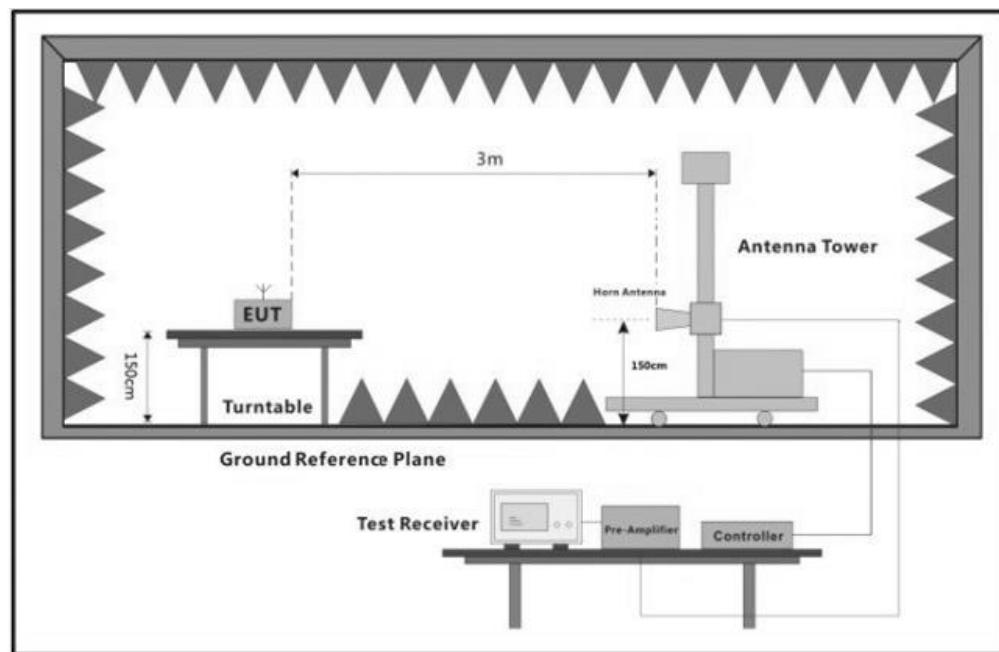
Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1



30MHz-1000MHz



Above 1GHz

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1

## 5.1.3 Test Limits

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

According to §15.249(a), the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency	Filed Strength of Fundamental (milli-volts/meter)	Field Strength of Harmonics (micro-volts/meter)
902 ~ 928 MHz	50	500
2400 ~ 2483.5 MHz	50	500
5725 ~5875 MHz	50	500
24.0 ~24.25 GHz	250	2500

The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in §15.35 for limiting peak emissions apply.

### Note:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dB $\mu$ V/m) = 20 log Emission level ( $\mu$ V/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.
4. Emission from 9kHz to 30MHz is more than 20dB below the limit.

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1

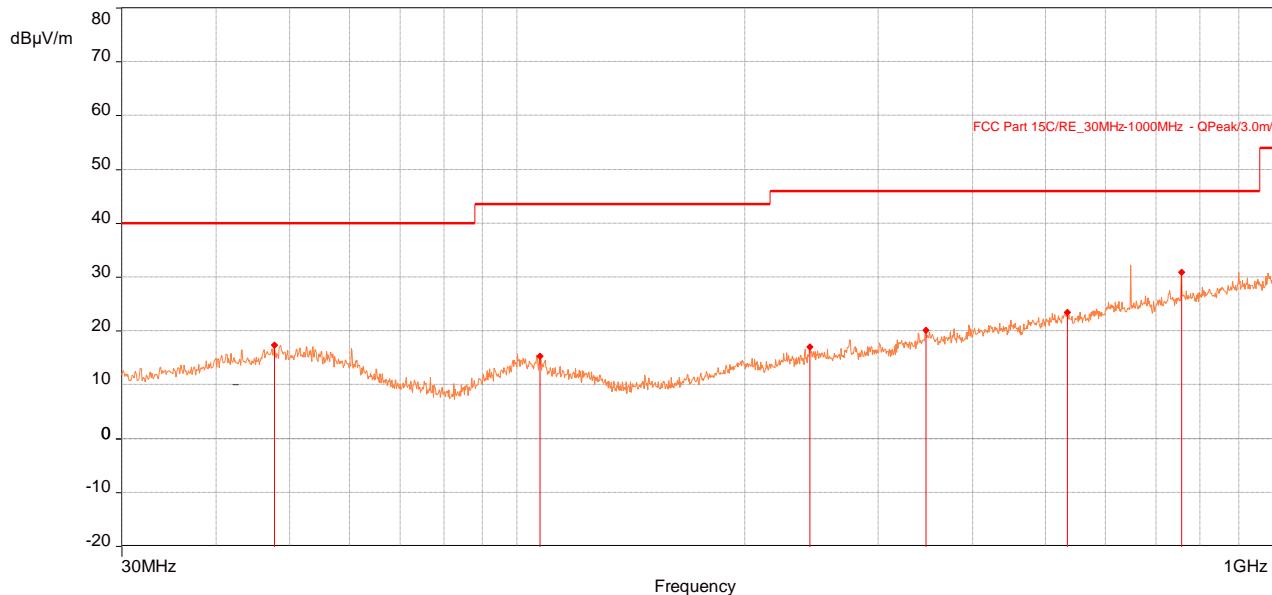
## 5.1.4 Test Results

The disturbance below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

### 5.1.4.1 Radiated Emissions Test (Below 1GHz)

Test Point	Operation Mode	Result
Horizontal	TX mode	PASS

EUT Name	R/C CAR
Operating Condition	DC: 4.5V(AA*3)
Test Condition	Ambient Temperature: 24°C Humidity: 58%RH



Frequency (MHz)	Peak (dB $\mu$ V/m)	QP (dB $\mu$ V/m)	QP Lim. (dB $\mu$ V/m)	Margin (dB)	Angle (°)	Height (m)	Polarization
47.751	17.41	/	40.00	-22.59	136.00	1.99	Horizontal
107.115	15.38	/	43.50	-28.12	136.00	1.99	Horizontal
243.691	17.05	/	46.00	-28.95	140.00	1.99	Horizontal
346.705	20.18	/	46.00	-25.82	0.00	1.00	Horizontal
533.915	23.51	/	46.00	-22.49	317.00	1.99	Horizontal
756.045	30.88	/	46.00	-15.12	124.00	1.99	Horizontal

1.QP is abbreviation of Quasi-Peak

2.Margin = Emission Level - Limit Value

3.The emission levels of other frequencies were more than 20dB margin against the limit

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

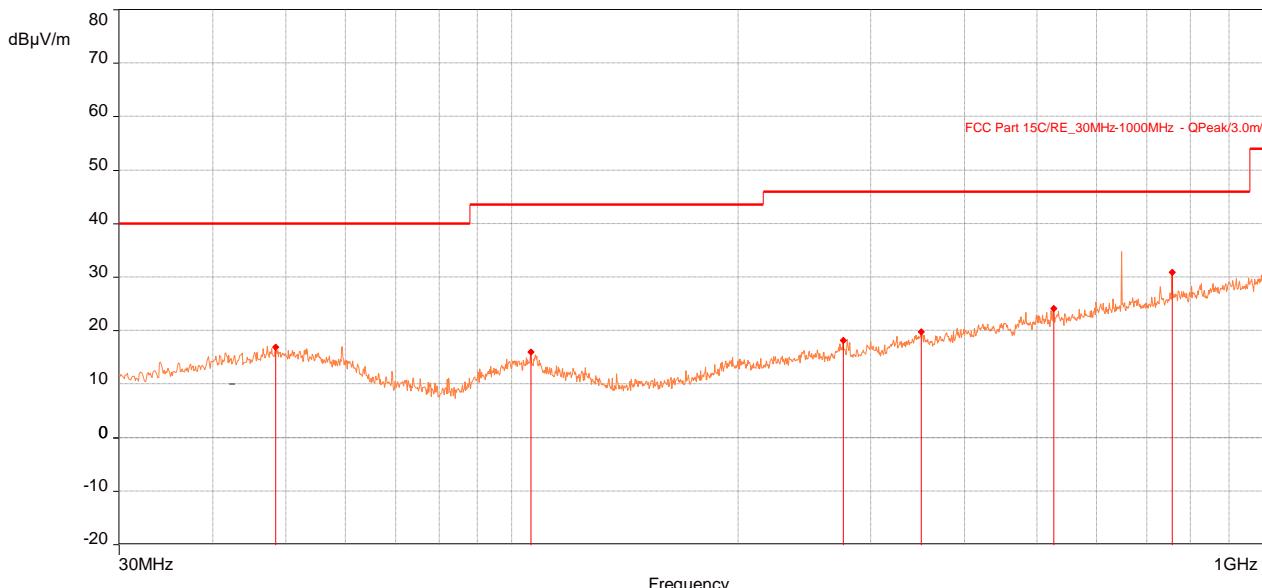
Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1

Test Point	Operation Mode	Result
Vertical	TX mode	PASS

EUT Name	R/C CAR
Operating Condition	DC: 4.5V(AA*3)
Test Condition	Ambient Temperature: 24°C Humidity: 58%RH



Frequency (MHz)	Peak (dB $\mu$ V/m)	QP (dB $\mu$ V/m)	QP Lim. (dB $\mu$ V/m)	Margin (dB)	Angle (°)	Height (m)	Polarization
48.43	16.95	/	40.00	-23.05	227.00	1.99	Vertical
105.951	16.04	/	43.50	-27.46	263.00	1.00	Vertical
275.992	18.23	/	46.00	-27.77	114.00	1.00	Vertical
350.391	19.79	/	46.00	-26.21	79.00	1.00	Vertical
525.282	24.20	/	46.00	-21.80	137.00	1.00	Vertical
756.045	30.88	/	46.00	-15.12	250.00	1.99	Vertical

1.QP is abbreviation of Quasi-Peak

2.Margin = Emission Level - Limit Value

3.The emission levels of other frequencies were more than 20dB margin against the limit

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1

## 5.1.4.2 Radiated Emissions Test (Above 1GHz)

EUT Name	R/C CAR						
Channel	The Lowest Channel (2412MHz)			Detector Function		Peak (PK) Average (AV)	
Frequency Range	Above 1GHz			Result		PASS	

Antenna Polarity & Test Distance: Horizontal At 3m								
Frequency (MHz)	Emission Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Height (m)	Angle (°)	Polarization	Correction (dB)	Detector
2390.04	26.14	54.00	-27.86	1.48	224.00	Horizontal	-17.93	Average
2400	29.97	54.00	-24.03	1.48	309.00	Horizontal	-17.93	Average
*2412	66.71	94.00	-27.29	1.48	231.00	Horizontal	-17.93	Average
4825	30.58	54.00	-23.42	1.00	37.00	Horizontal	-17.93	Average
7235.6	25.76	54.00	-28.24	1.00	280.00	Horizontal	-17.93	Average
2390.04	44.07	74.00	-29.93	1.48	224.00	Horizontal	-3.79	Peak
2400	47.90	74.00	-26.10	1.48	309.00	Horizontal	-3.74	Peak
*2412	84.64	114.00	-29.36	1.48	231.00	Horizontal	-3.61	Peak
4825	48.51	74.00	-25.49	1.00	37.00	Horizontal	1.44	Peak
7235.6	43.69	74.00	-30.31	1.00	280.00	Horizontal	8.60	Peak
Antenna Polarity & Test Distance: Vertical At 3m								
Frequency (MHz)	Emission Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Height (m)	Angle (°)	Polarization	Correction (dB)	Detector
2390.04	26.48	54.00	-27.52	1.48	37.00	Vertical	-17.93	Average
2400	32.72	54.00	-21.28	1.48	51.00	Vertical	-17.93	Average
*2412	70.02	94.00	-23.98	1.48	174.00	Vertical	-17.93	Average
4825	34.91	54.00	-19.09	1.00	105.00	Vertical	-17.93	Average
7235.6	25.96	54.00	-28.04	1.99	298.00	Vertical	-17.93	Average
2390.04	44.41	74.00	-29.59	1.48	37.00	Vertical	-3.79	Peak
2400	50.65	74.00	-23.35	1.48	51.00	Vertical	-3.74	Peak
*2412	87.95	114.00	-26.05	1.48	174.00	Vertical	-3.61	Peak
4825	52.84	74.00	-21.16	1.00	105.00	Vertical	1.44	Peak
7235.6	43.89	74.00	-30.11	1.99	298.00	Vertical	8.60	Peak
Remarks:								
1. Emission level (dB $\mu$ V/m) = Raw Value (dB $\mu$ V) + Correction Factor (dB/m) 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) 3. The emission levels of other frequencies were more than 20dB margin against the limit. 4. Margin = Emission level - Limit value 5. " * ": Fundamental frequency. 6. The average value of fundamental frequency is: Average value = Peak value +AV factor, where the AV factor is calculated from following formula: AV factor=20 log (Duty cycle) = 20 log (12.70%) = -17.93dB, please see 5.1.4.3.								

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

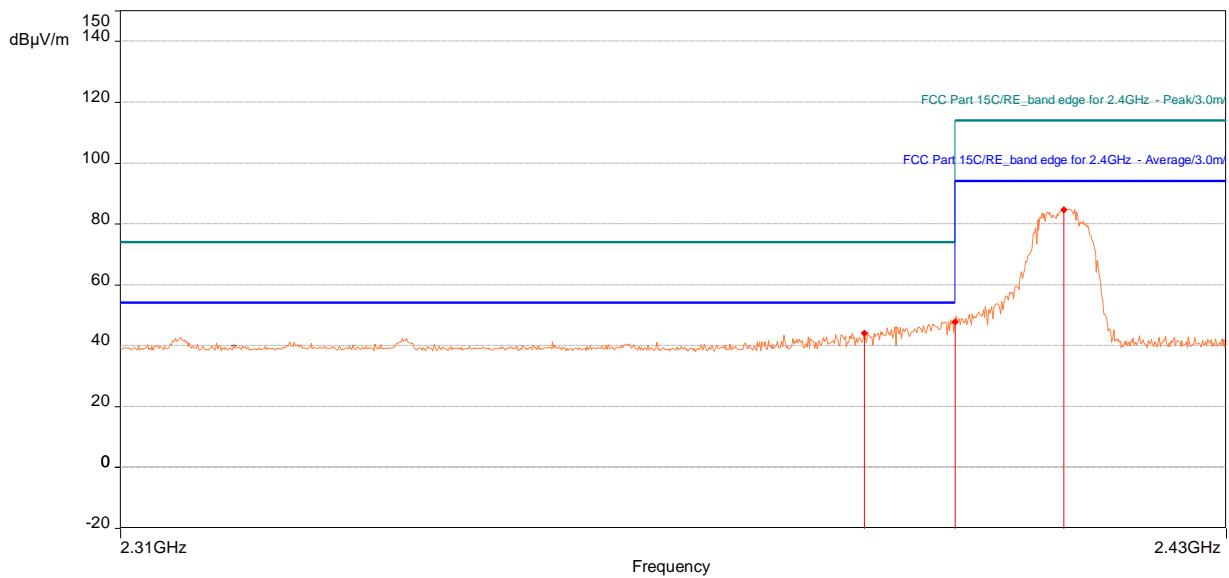
Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

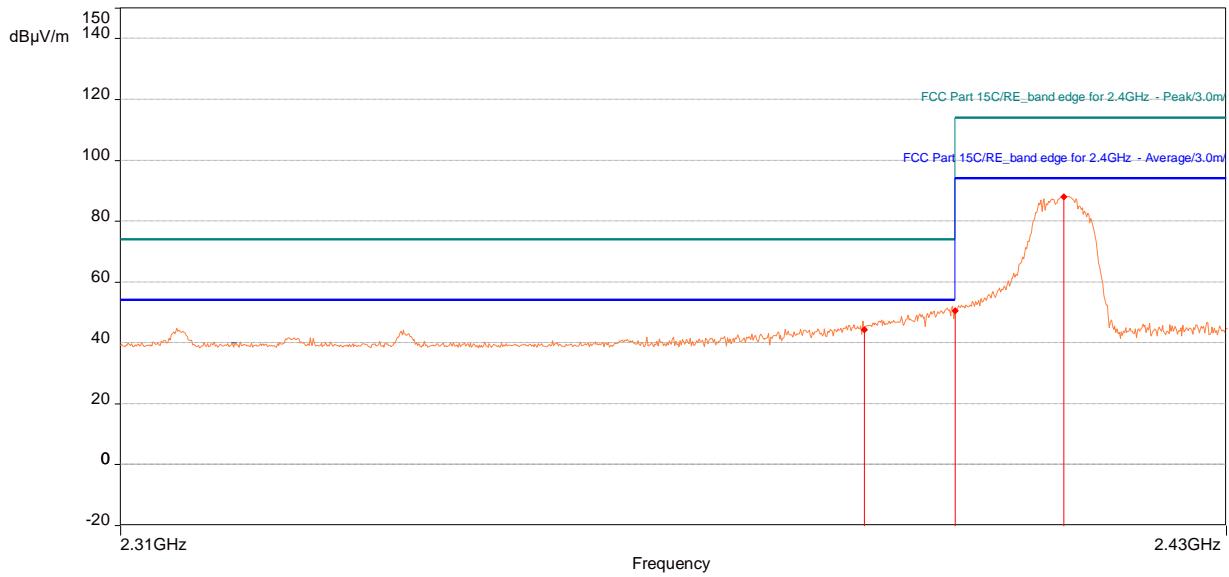
No.: AJT221027032E-1

## Band Edge Plot

### 2412MHz Horizontal



### 2412MHz Vertical



This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1

EUT Name	R/C CAR			
Channel	The Middle Channel (2442mhz)		Detector Function	Peak (PK) Average (AV)
Frequency Range	Above 1GHz		Result	PASS

Antenna Polarity & Test Distance: Horizontal At 3m								
Frequency (MHz)	Emission Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Height (m)	Angle (°)	Polarization	Correction (dB)	Detector
*2442.0005	66.19	94.00	-27.81	1.48	222.00	Horizontal	-17.93	Average
4884.5	30.55	54.00	-23.45	1.99	279.00	Horizontal	-17.93	Average
7325.7	25.94	54.00	-28.06	1.99	89.00	Horizontal	-17.93	Average
*2442.0005	84.12	114.00	-29.88	1.48	222.00	Horizontal	-3.78	Peak
4884.5	48.48	74.00	-25.52	1.99	279.00	Horizontal	0.85	Peak
7325.7	43.87	74.00	-30.13	1.99	89.00	Horizontal	8.34	Peak
Antenna Polarity & Test Distance: Vertical At 3m								
Frequency (MHz)	Emission Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Height (m)	Angle (°)	Polarization	Correction (dB)	Detector
*2442.0005	71.15	94.00	-22.85	1.48	183.00	Vertical	-17.93	Average
4884.5	33.37	54.00	-20.63	1.00	22.00	Vertical	-17.93	Average
7325.7	25.86	54.00	-28.14	1.00	345.00	Vertical	-17.93	Average
*2442.0005	89.08	114.00	-24.92	1.48	183.00	Vertical	-3.78	Peak
4884.5	51.30	74.00	-22.70	1.00	22.00	Vertical	0.85	Peak
7325.7	43.79	74.00	-30.21	1.00	345.00	Vertical	8.34	Peak

Remarks:

1. Emission level (dB $\mu$ V/m) = Raw Value (dB $\mu$ V) + Correction Factor (dB/m)
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The emission levels of other frequencies were more than 20dB margin against the limit.
4. Margin = Emission level - Limit value
5. " \* ": Fundamental frequency.
6. The average value of fundamental frequency is: Average value = Peak value +AV factor, where the AV factor is calculated from following formula: AV factor=20 log (Duty cycle) = 20 log (12.70%) = -17.93dB, please see 5.1.4.3.

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1

EUT Name	R/C CAR			
Channel	The Highest Channel (2472MHz)		Detector Function	Peak (PK) Average (AV)
Frequency Range	Above 1GHz		Result	PASS

Antenna Polarity & Test Distance: Horizontal At 3m								
Frequency (MHz)	Emission Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Height (m)	Angle (°)	Polarization	Correction (dB)	Detector
*2472	67.43	94.00	-26.57	1.48	235.00	Horizontal	-17.93	Average
2483.5	23.42	54.00	-30.58	1.48	225.00	Horizontal	-17.93	Average
4944	31.50	54.00	-22.50	1.99	139.00	Horizontal	-17.93	Average
7415.8	25.53	54.00	-28.47	1.99	108.00	Horizontal	-17.93	Average
*2472	85.36	114.00	-28.64	1.48	235.00	Horizontal	-3.70	Peak
2483.5	41.35	74.00	-32.65	1.48	225.00	Horizontal	-3.76	Peak
4944	49.43	74.00	-24.57	1.99	139.00	Horizontal	1.22	Peak
7415.8	43.46	74.00	-30.54	1.99	108.00	Horizontal	8.53	Peak
Antenna Polarity & Test Distance: Vertical At 3m								
Frequency (MHz)	Emission Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Height (m)	Angle (°)	Polarization	Correction (dB)	Detector
*2472	72.79	94.00	-21.21	1.48	198.00	Vertical	-17.93	Average
2483.5	28.06	54.00	-25.94	1.48	183.00	Vertical	-17.93	Average
4944	35.16	54.00	-18.84	1.00	20.00	Vertical	-17.93	Average
7415.8	26.24	54.00	-27.76	1.00	199.00	Vertical	-17.93	Average
*2472	90.72	114.00	-23.28	1.48	198.00	Vertical	-3.70	Peak
2483.5	45.99	74.00	-28.01	1.48	183.00	Vertical	-3.76	Peak
4944	53.09	74.00	-20.91	1.00	20.00	Vertical	1.22	Peak
7415.8	44.17	74.00	-29.83	1.00	199.00	Vertical	8.53	Peak

Remarks:

1. Emission level (dB $\mu$ V/m) = Raw Value (dB $\mu$ V) + Correction Factor (dB/m)
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The emission levels of other frequencies were more than 20dB margin against the limit.
4. Margin = Emission level - Limit value
5. " \* ": Fundamental frequency.
6. The average value of fundamental frequency is: Average value = Peak value +AV factor, where the AV factor is calculated from following formula: AV factor=20 log (Duty cycle) = 20 log (12.70%) = -17.93dB, please see 5.1.4.3.

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

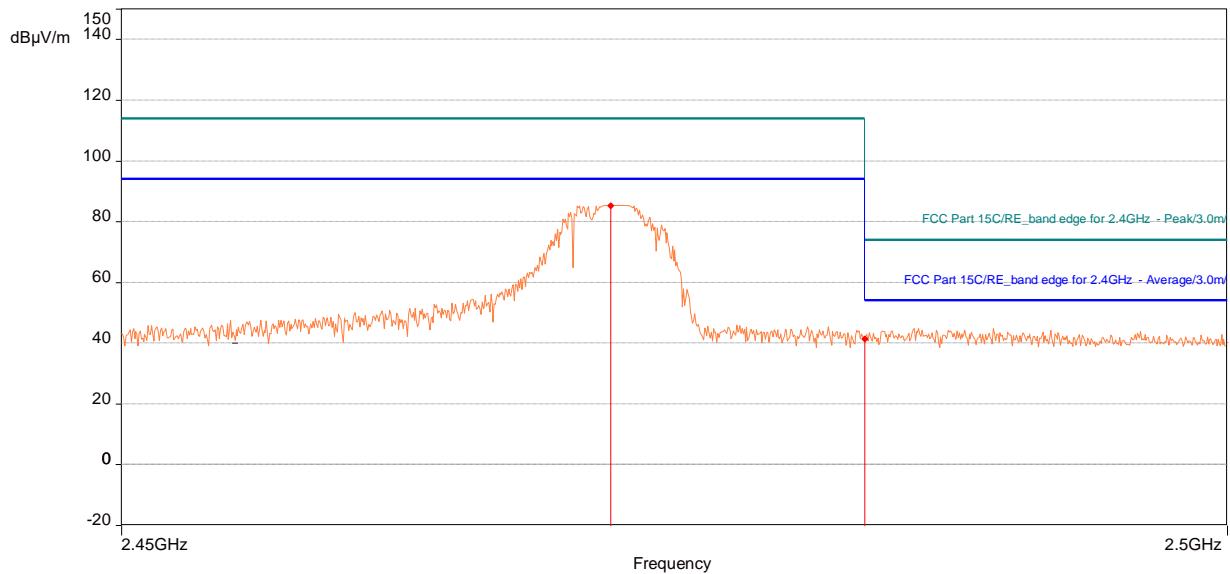
Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

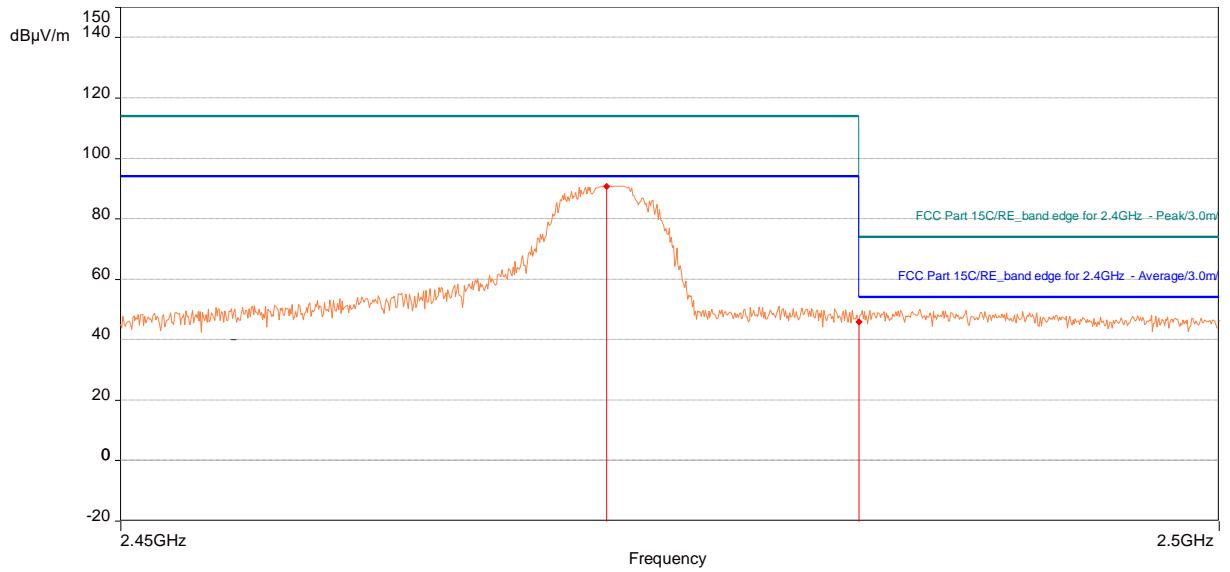
No.: AJT221027032E-1

## Band Edge Plot

### 2472MHz Horizontal



### 2472MHz Vertical



This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1

## 5.1.4.3 Calculation of Average Factor

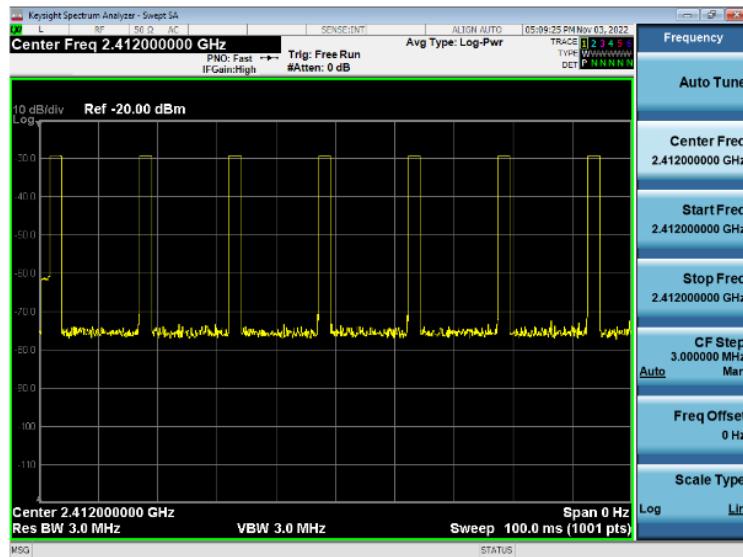
Effective period of the cycle = 1.92ms

The duration of one cycle = 15.12ms

Duty Cycle = 1.92ms / 15.12ms = 12.70%

Averaging factor in dB =  $20 \log (\text{duty cycle}) = 20 \log (12.70\%) = -17.93\text{dB}$

100ms Duty Cycle



This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

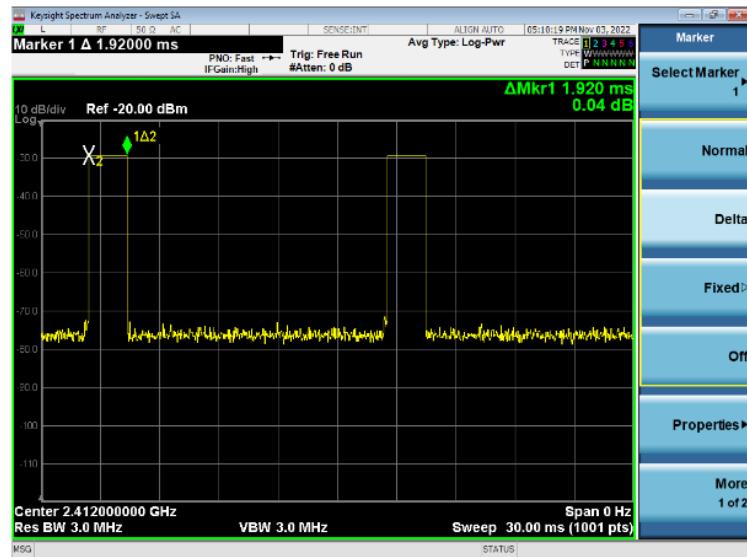
AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

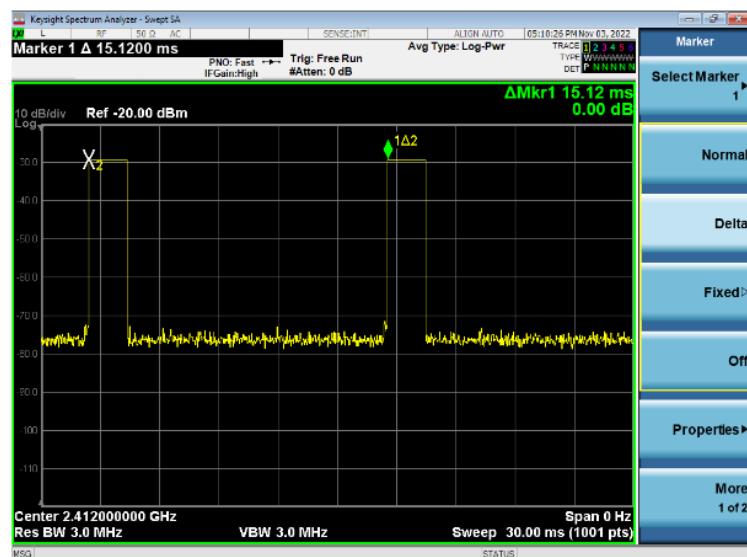
# Test Report

No.: AJT221027032E-1

Ton of one cycle



The duration of one cycle



This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1

## 5.2 20dB Bandwidth

For test instruments and accessories used see section 6

### 5.2.1 Test Procedures

- (1) Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- (2) Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
- (3) Measure the frequency difference of two frequencies that were attenuated 20dB from the reference level. Record the frequency difference as the emission bandwidth.
- (4) Repeat above procedures until all frequencies measured were complete.

### 5.2.2 Test Setup



### 5.2.3 Test Limits

According to FCC 15.215(c), must be designed to ensure that the 20dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

### 5.2.4 Test Results

Channel	frequency (MHz)	20dB Bandwidth (MHz)
The lowest channel	2412	1.366
The middle channel	2442	1.206
The highest channel	2472	1.183

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

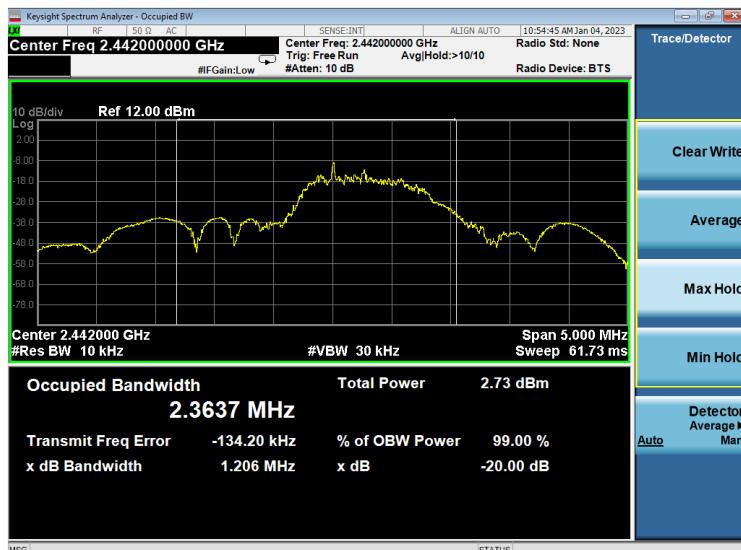
Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1



2412MHz



2442MHz

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1



2472MHz

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1

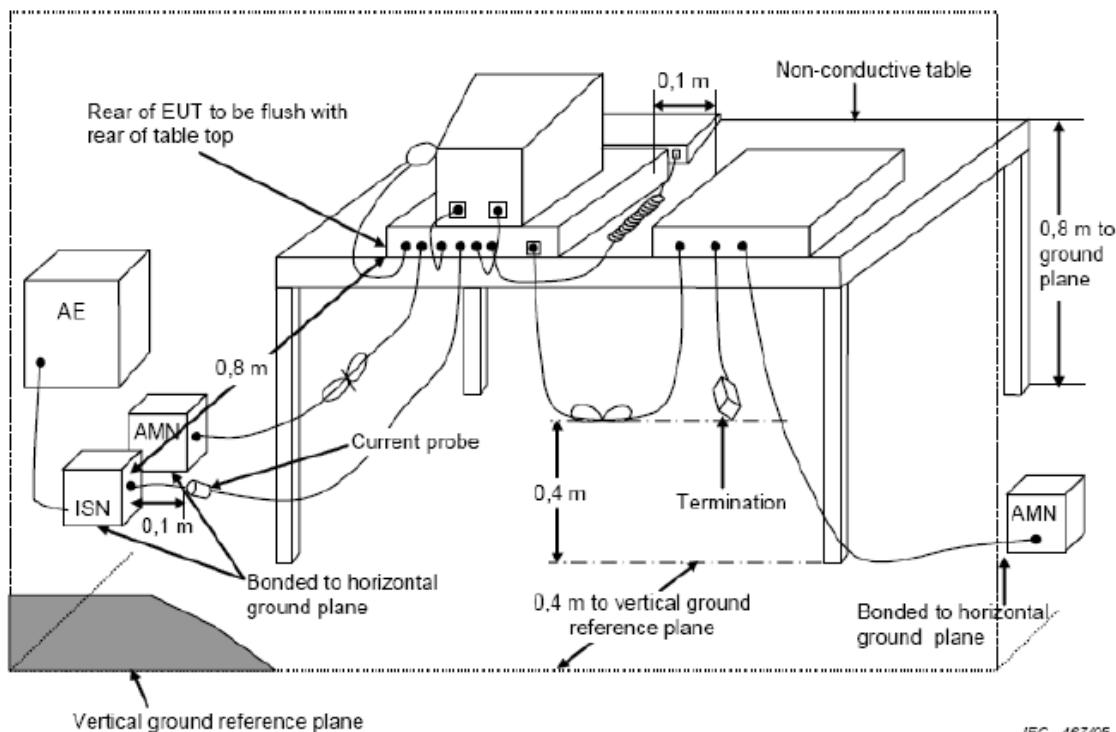
## 5.3 Conducted Emission (CE)

For test instruments and accessories used see section 6

### 5.3.1 Test Procedures

The PC Power connected to the power mains through a line impedance stabilization network (L.I.S.N.#2). This provides a 50 ohm coupling impedance for the EUT. Please refer the block diagram of the test setup and photographs. The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#1). Power on the PC and let it work normally, we use a keyboard test software, let EUT working in test mode, then test it. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to RSS-Gen issue 5 on Conducted Emission Test.

### 5.3.2 Test Setup



This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1

## 5.3.3 Test Limits

Standard: FCC Part 15 §15.207(a)		
Frequency of emission (MHz)	Maximum RF Line Voltage	
	Quasi-Peak Level dB(µV)	Average Level dB(µV)
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

Notes: 1. \* Decreasing linearly with logarithm of frequency.  
2. The lower limit shall apply at the transition frequencies.

## 5.3.4 Test Results

Not Applicable

Note: The device is a DC power supply and does not apply to conducted emissions.

## 5.4 Antenna Requirements

### 5.4.1 Test Standard:

FCC Part 15, Subpart C 15.203

### 5.4.2 Standard Requirement:

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

### 5.4.3 EUT Antenna:

The antenna is WHIP Antenna and no consideration of replacement. The best case gain of the antenna is 0dBi. Antenna location: Refer to Internal Photos of R/C CAR.

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1

## 6 Test Equipment

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1	Spectrum Analyzer	Keysight	N9010A	MY51120099	2022/08/08	2023/08/08
2	JS0806-2 RF Control Unit	Tonscend	JS0806-2	188060124	2022/08/09	2023/08/09
3	Broadband Preamplifier	SCHWARZBECK	BBV 9743B	00067	2022/03/22	2023/03/22
4	Broadband Preamplifier	SCHWARZBECK	BBV 9718B	00002	2022/03/22	2023/03/22
5	EMI Test Receiver	ROHDE & SCHWARZ	ESR3	102452	2022/03/22	2023/03/22
6	Trilog Broadband Antenna	SCHWARZBECK	VULB 9163	9163-1127	2021/07/12	2023/07/12
7	Horn Antenna	SCHWARZBECK	BBHA 9120D	01829	2022/03/22	2023/03/22
8	DC Power Supply	SIGLENT	SPD1168X	SPD1XEAD3 R 0167	2022/03/22	2023/03/22
9	Vector Signal Generator	Keysight	N5172B	MY53052255	2022/03/22	2023/03/22
10	Analog Signal Generator	Keysight	N5171B	MY53051692	2022/03/22	2023/03/22
11	Temperature Humidity Chamber	Yiheng	BPS-50CB	191005684	2022/07/28	2023/07/28
12	Temperature and Humidity Indicator	JianDaRenKe	Cos-03	612058	2022/08/02	2023/08/02
13	BAT-EMC Testing (Test Software)	NEXIO	BAT-EMC	Version: 3.16.0.74	N/A	N/A
14	JS1120-3 Test System (Test Software)	Tonscend	JS1120-3	Version: 2.5.77.0418	N/A	N/A
15	Double Ridge Guide Horn Antennas	A.H.Systems	SAS-574	588	2021/06/28	2023/06/28
16	Active Loop Antenna	BeiJing DaZe technology co. LTD	ZN30900C	15015	2021/04/18	2023/04/18

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)

# Test Report

No.: AJT221027032E-1

## 7 Test Photographs

Referring to – “Test Setup Photos of R/C CAR”.

## 8 Photos of the EUT

Referring to – “External Photos of R/C CAR” and “Internal Photos of R/C CAR”.

## 9 Manufacturer/ Approval Holder Declaration

The following identical model(s):

SG-1204, G2063, G2060-1, G2060-2, G2061

Belong to the tested device:

Product Description: R/C CAR  
Model No.: G2065

**END OF TEST REPORT**

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.

AJT TESTING SERVICES LIMITED

Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China  
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: [www.ajtesting.com](http://www.ajtesting.com) Email: [info@ajtesting.com](mailto:info@ajtesting.com)