







No.: AJT201223038E-1

Applicant Name : GUANGDONG HENGDI TECHNOLOGY CORP., LTD.

**Applicant Address** : THE WEST OF NINGCHUAN ROAD AND THE SOUTH OF HUANCUI

ROAD, CHENGHAI ZONE, SHANTOU CITY, GUANGDONG, CHINA

Manufacturer GUANGDONG HENGDI TECHNOLOGY CORP., LTD.

Manufacturer Address : THE WEST OF NINGCHUAN ROAD AND THE SOUTH OF HUANCUI

ROAD, CHENGHAI ZONE, SHANTOU CITY, GUANGDONG, CHINA

Sample Description : RC TOY Model No. : 2008

: 2008, 2003, 2004, 2005, 2006, 2007, 2009, 2010, 2011, 2012, 2013, Additional Model

2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 1336, 1340, 1706, 1818, 1912, 1912B, 1343A, 1343W, 1339A, 1339W, 1339W-VR, 1332A, 1332W, 1332W-VR, 1803, 1802, 1902, 1903, 1915, 1905-1, 1905-2, 1906, DB1-1, DB2-1, DB3-1, DB1-2, DB2-2, DB3-2, DB1-3, DB2-3, DB3-3, DB2-4, DB2-5, T10B, T11B, T12B, T13B, T15B, T16B, T17B, T18B, T19B, T20B, T30B, T31B, T32B, T33B,

T35B, T36B, T37B, T38B, T39B, T40B

Client Specified Age Grade :/ Tested Age Grade :/

Sample Received Date : 23 December, 2020 : 31 December, 2020 **Testing Completed Date** 

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:

Reviewed by: Fly Living Approved by

Position:

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### 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	23 December, 2020
Testing commenced on	23 December, 2020 31 December, 2020
Testing concluded on	31 December, 2020

#### 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	RC TOY
Model No.	2008
FCC ID	2AWZK-2008
Number of Tested Samples	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Power Supply Voltage	DC: 6.0V(AA*4)
Operating Mode	TX Mode
Operation Frequency	2407-2467MHz
Number of Channel	61
Modulation	GFSK
Antenna Type	Dedicated Antenna
Antenna Gain	0dBi

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### 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

EUT

### 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.

ELIT configure mode	Applicable to		Description		
EUT configure mode	RE < 1G	RE≥1G	PLC	BW	DC 6.0V from battery
Α	V	<b>√</b>	N/A	√	DC 6.0V Iron battery

Where RE<1G: Radiated Emission below 1GHz

RE ≥ 1G: Radiated Emission above 1GHz

PLC: Power Line Conducted Emission 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	2407	18	2424	35	2441	52	2458
2	2408	19	2425	36	2442	53	2459
3	2409	20	2426	37	2443	54	2460
4	2410	21	2427	38	2444	55	2461
5	2411	22	2428	39	2445	56	2462
6	2412	23	2429	40	2446	57	2463
7	2413	24	2430	41	2447	58	2464
8	2414	25	2431	42	2448	59	2465
9	2415	26	2432	43	2449	60	2466
10	2416	27	2433	44	2450	61	2467
11	2417	28	2434	45	2451	7	1 -0
12	2418	29	2435	46	2452	600	
13	2419	30	2436	47	2453	1	(\ 1
14	2420	31	2437	48	2454	. 9	-
15	2421	32	2438	49	2455		-27
16	2422	33	2439	50	2456		1 (
17	2423	34	2440	51	2457	_ </td <td></td>	

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**Channel List** 

Channel	Frequency (MHz)
The lowest channel	2407
The middle channel	2437
The highest channel	2467

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:	1F&2F YIFENG BUILDING, CHENGHUA INDUSTRIAL ZONE, CHENGHAI DISTRICT, SHANTOU CITY
Tel:	86-754-85860999
Fax:	86-754-86984098

### 4.2 Test Facility

The test facility is recognized, certified, or acci	redited 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%	







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### 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 (Stand	ard: ETSI TR 100 028)
Conducted emissions	±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

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

### 5 Test Conditions and Results

#### 5.1 Radiated Emission

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.

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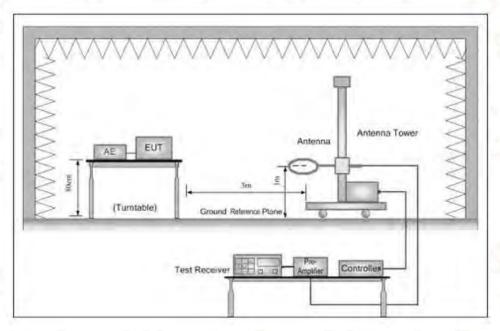
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- (5) The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- (6) For below 30MHz, a loop antenna with its vertical plane is place 3m from the EUT and rotated about its vertical axis for maximum response 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:

- 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

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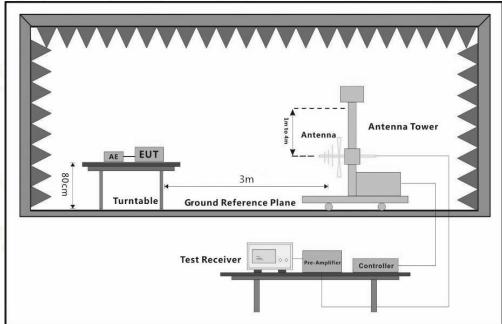
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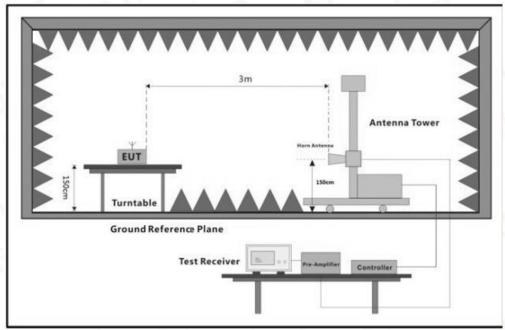




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30MHz-1000MHz



Above 1GHz

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#### 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:

2400/F(kHz)	300
24000/F(kHz)	30
30	30
100	3
150	3
200	3
500	3
	30 100 150 200

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.







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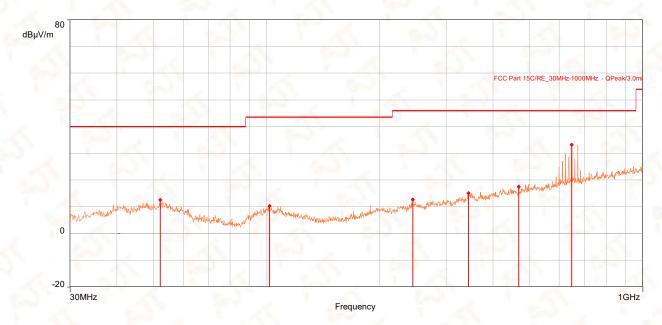
#### 5.1.4 Test Results

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 (The highest channel: 2467MHz)	PASS

EUT Name	RC TOY
Operating Condition	DC: 6.0V(AA*4)
Test Condition	Ambient Temperature: 18°C Humidity: 60%RH



Frequency (MHz)	Peak (dBµV/m)	QP (dBµV/m)	QP Lim. (dBµV/m)	Margin (dB)	Angle (°)	Height (m)	Polarization
52.116	12.61	1	40.00	-27.39	200.00	1.98	Horizontal
101.78	10.25	1	43.50	-33.25	137.00	1.98	Horizontal
244.952	12.69	1	46.00	-33.31	216.00	1.98	Horizontal
343.989	15.09	1	46.00	-30.91	237.00	1.98	Horizontal
468.052	17.50	1	46.00	-28.50	16.00	1.98	Horizontal
647.987	33.25	1	46.00	-12.75	181.00	1.00	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

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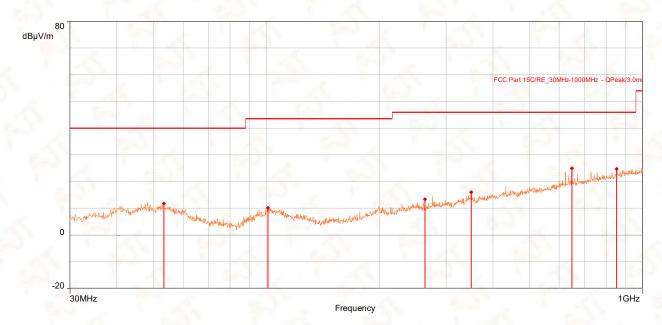




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Test Point	Operation Mode	Result
Vertical	TX mode (The highest channel: 2467MHz)	PASS

EUT Name	RC TOY
Operating Condition	DC: 6.0V(AA*4)
Test Condition	Ambient Temperature: 18°C Humidity: 60%RH



Frequency (MHz)	Peak (dBµV/m)	QP (dBµV/m)	QP Lim. (dBµV/m)	Margin (dB)	Angle (°)	Height (m)	Polarization
53.377	11.80	1	40.00	-28.20	190.00	1.01	Vertical
100.907	10.12	1	43.50	-33.38	209.00	1.01	Vertical
263.964	13.41	1	46.00	-32.59	156.00	2.00	Vertical
350.294	15.99	1	46.00	-30.01	0.00	1.01	Vertical
648.084	24.97	1	46.00	-21.03	113.00	1.01	Vertical
852.269	24.68	1	46.00	-21.32	19.00	2.00	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

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#### 5.1.4.2 Radiated Emissions Test (Above 1GHz)

EUT Name	RC TOY	7 X 12	1 20 9
Channel	The Lowest Channel (2407MHz)	Detector Function	Peak (PK) Average (AV)
Frequency Range	Above 1GHz	Result	PASS

	F	Antenna Pola	arity & Te	st Distan	ce: Horizo	ontal At 3m		
Frequency (MHz)	Emission Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (m)	Angle (°)	Polarization	Correction (dB)	Detecto
2390.04	20.25	54.00	-33.75	1.99	101.00	Horizontal	-19.33	Average
2400	20.74	54.00	-33.26	1.01	265.00	Horizontal	-19.33	Average
*2407.2	57.44	94.00	-36.56	1.99	138.00	Horizontal	-19.33	Average
4814.55	15.49	54.00	-38.51	1.00	38.00	Horizontal	-19.33	Average
7221.5	24.76	54.00	-29.24	1.99	25.00	Horizontal	-19.33	Average
2390.04	39.58	74.00	-34.42	1.99	101.00	Horizontal	-2.58	Peak
2400	40.07	74.00	-33.93	1.01	265.00	Horizontal	-2.53	Peak
*2407.2	76.77	114.00	-37.23	1.99	138.00	Horizontal	-2.46	Peak
4814.55	34.82	74.00	-39.18	1.00	38.00	Horizontal	2.53	Peak
7221.5	44.09	74.00	-29.91	1.99	25.00	Horizontal	8.03	Peak
	•	Antenna Po	larity & T	est Dista	nce: Verti	cal At 3m		
Frequency (MHz)	Emission Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (m)	Angle (°)	Polarization	Correction (dB)	Detecto
2390.04	21.02	54.00	-32.98	1.00	54.00	Vertical	-19.33	Average
2400	20.61	54.00	-33.39	1.00	260.00	Vertical	-19.33	Average
*2407.2	52.87	94.00	-41.13	1.98	255.00	Vertical	-19.33	Average
4814.55	16.30	54.00	-37.70	2.00	286.00	Vertical	-19.33	Average
7221.5	23.17	54.00	-30.83	1.01	6.00	Vertical	-19.33	Average
2390.04	40.35	74.00	-33.65	1.00	54.00	Vertical	-2.58	Peak
2400	39.94	74.00	-34.06	1.00	260.00	Vertical	-2.53	Peak
*2407.2	72.20	114.00	-41.80	1.98	255.00	Vertical	-2.46	Peak
4814.55	35.63	74.00	-38.37	2.00	286.00	Vertical	2.53	Peak

#### Remarks:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + 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 (10.81%) = -19.33dB, please see 5.1.4.3.

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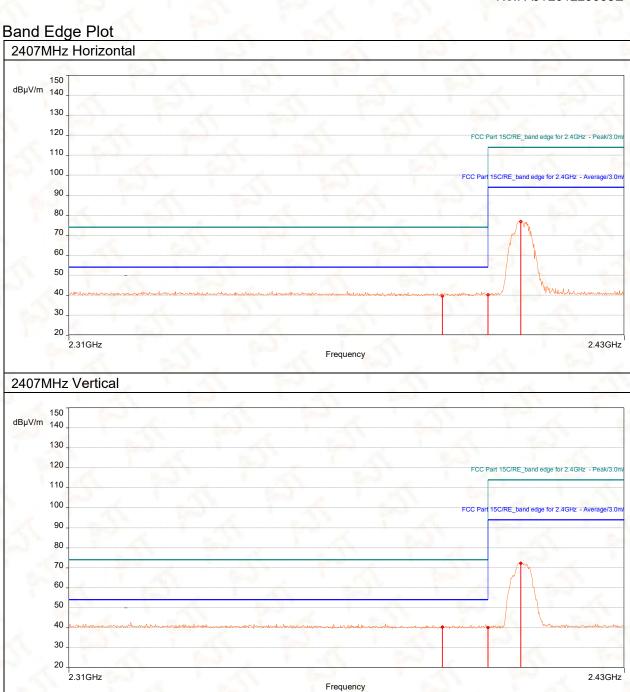
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EUT Name	RC TOY	2, 1 4	( (m) )
Channel	The Middle Channel (2437mhz)	Detector Function	Peak (PK) Average (AV)
Frequency Range	Above 1GHz	Result	PASS

	P	Antenna Pol	arity & Te	st Distan	ce: Horizo	ntal At 3m		
Frequency (MHz)	Emission Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (m)	Angle (°)	Polarization	Correction (dB)	Detector
*2437.074	57.32	94.00	-36.68	2.00	159.00	Horizontal	-19.33	Average
4874.35	15.94	54.00	-38.06	1.00	132.00	Horizontal	-19.33	Average
7311.2	22.66	54.00	-31.34	1.99	73.00	Horizontal	-19.33	Average
*2437.074	76.65	114.00	-37.35	2.00	159.00	Horizontal	-2.61	Peak
4874.35	35.27	74.00	-38.73	1.00	132.00	Horizontal	1.93	Peak
7311.2	41.99	74.00	-32.01	1.99	73.00	Horizontal	8.19	Peak
		Antenna Po	larity & T	est Dista	nce: Verti	cal At 3m		
Frequency (MHz)	Emission Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (m)	Angle (°)	Polarization	Correction (dB)	Detector
*2437.074	52.89	94.00	-41.11	1.99	22.00	Vertical	-19.33	Average
4874.35	15.47	54.00	-38.53	1.01	88.00	Vertical	-19.33	Average
7311.2	24.63	54.00	-29.37	1.01	13.00	Vertical	-19.33	Average
*2437.074	72.22	114.00	-41.78	1.99	22.00	Vertical	-2.61	Peak
4874.35	34.80	74.00	-39.20	1.01	88.00	Vertical	1.93	Peak
7311.2	43.96	74.00	-30.04	1.01	13.00	Vertical	8.19	Peak

#### Remarks:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + 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 (10.81%) = -19.33dB, please see 5.1.4.3.

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EUT Name	RC TOY	2 1 4	( 60° 1
Channel	The Highest Channel (2467MHz)	Detector Function	Peak (PK) Average (AV)
Frequency Range	Above 1GHz	Result	PASS

	F	Antenna Pol	arity & Te	st Distan	ce: Horizo	ontal At 3m		
Frequency (MHz)	Emission Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (m)	Angle (°)	Polarization	Correction (dB)	Detecto
*2467.2	57.26	94.00	-36.74	2.00	157.00	Horizontal	-19.33	Average
2483.5	20.59	54.00	-33.41	1.01	344.00	Horizontal	-19.33	Average
4934.15	17.70	54.00	-36.30	1.00	121.00	Horizontal	-19.33	Average
7402.05	23.86	54.00	-30.14	1.99	0.00	Horizontal	-19.33	Average
*2467.2	76.59	114.00	-37.41	2.00	157.00	Horizontal	-2.54	Peak
2483.5	39.92	74.00	-34.08	1.01	344.00	Horizontal	-2.67	Peak
4934.15	37.03	74.00	-36.97	1.00	121.00	Horizontal	2.05	Peak
7402.05	43.19	74.00	-30.81	1.99	0.00	Horizontal	8.34	Peak
	1	Antenna Po	larity & T	est Dista	nce: Verti	cal At 3m		
Frequency (MHz)	Emission Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (m)	Angle (°)	Polarization	Correction (dB)	Detecto
*2467.2	53.98	94.00	-40.02	1.99	28.00	Vertical	-19.33	Average
2483.5	20.89	54.00	-33.11	1.99	173.00	Vertical	-19.33	Average
4934.15	18.40	54.00	-35.60	2.00	136.00	Vertical	-19.33	Average
7402.05	24.25	54.00	-29.75	1.01	60.00	Vertical	-19.33	Average
*2467.2	73.31	114.00	-40.69	1.99	28.00	Vertical	-2.54	Peak
2483.5	40.22	74.00	-33.78	1.99	173.00	Vertical	-2.67	Peak
4934.15	37.73	74.00	-36.27	2.00	136.00	Vertical	2.05	Peak
7402.05	43.58	74.00	-30.42	1.01	60.00	Vertical	8.34	Peak

#### Remarks:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + 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 (10.81%) = -19.33dB, 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.

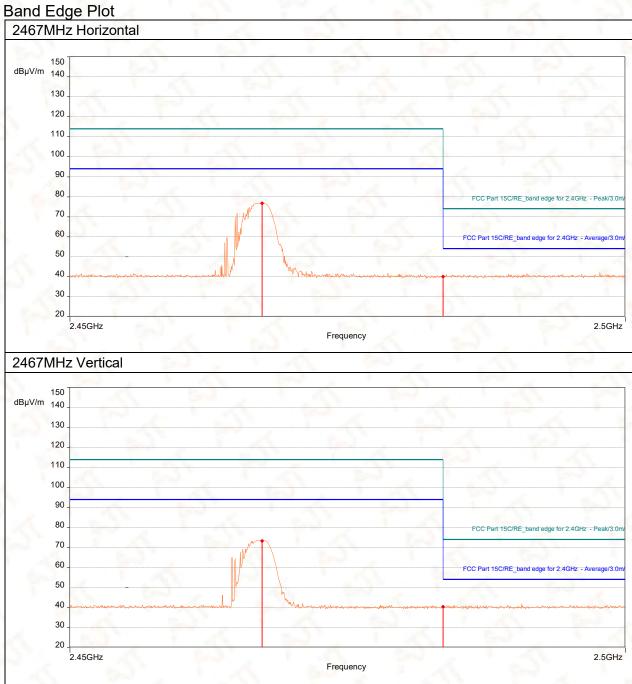
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#### 5.1.4.3 Calculation of Average Factor

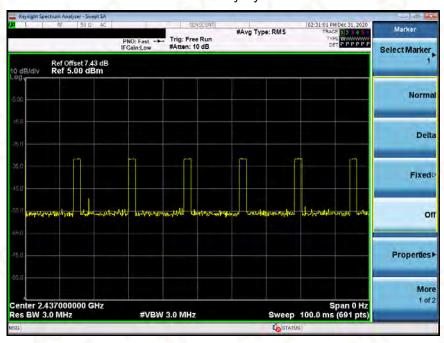
Effective period of the cycle = 1.739ms

The duration of one cycle = 16.090ms

Duty Cycle = 1.739ms / 16.090ms = 10.81%

Averaging factor in dB = 20 log (duty cycle) = 20 log (10.81%) = -19.33dB

#### 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.

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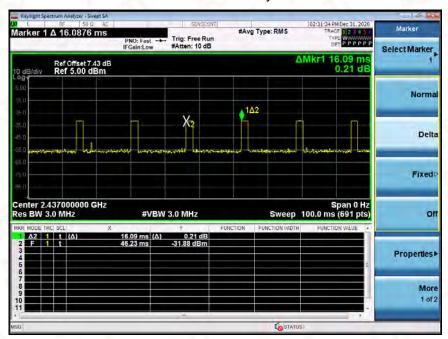




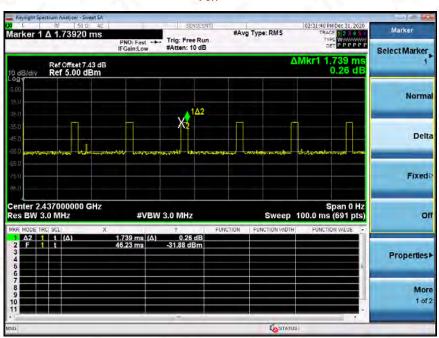


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#### The duration of one cycle



#### Ton



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 rademark, is permitted only with our prior written permission.

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#### 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

Spectrum Analyzer	Attenuator		EUT and Assistant System	-	DC Power
		]			

#### 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)	F <sub>L</sub> (MHz)	F <sub>H</sub> (MHz)	20dB Bandwidth (MHz)	
The lowest channel	2407	2406.504	2408.812	2.308	
The middle channel	2437	2436.520	2437.652	1.132	
The highest channel	2467	2464.900	2467.660	2.760	





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2407MHz



2437MHz

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2467MHz

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#### 5.3 Antenna Requirements

Test Standard: FCC Part 15, Subpart C 15.203

#### 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.

#### **EUT Antenna:**

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 0dBi.Antenna location: Refer to Appendix (Internal photos).





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### 6 Test Equipment

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1	Spectrum Analyzer	Keysight	N9010A	MY51120099	2020/06/22	2021/06/22
2	JS0806-2 RF Control Unit	Tonscend	JS0806-2	188060124	2020/12/18	2021/12/18
3	Broadband Preamplifier	SCHWARZBECK	BBV 9743B	00067	2020/03/28	2021/03/28
4	Broadband Preamplifier	SCHWARZBECK	BBV 9718B	00062	2020/03/28	2021/03/28
5	EMI Test Receiver	ROHDE & SCHWARZ	ESR3	102452	2020/06/22	2021/06/22
6	Trilog Broadband Antenna	SCHWARZBECK	VULB 9163	9163-1127	2020/06/12	2021/06/12
7	Horn Antenna	SCHWARZBECK	BBHA 9120D	01829	2020/06/04	2021/06/04
8	DC Power Supply	SIGLENT	SPD1168X	SPD1XEAD3 R 0167	2020/06/02	2021/06/02
9	Vector Signal Generator	Keysight	N5172B-506	MY53052255	2020/06/04	2021/06/04
10	EXG Analog Signal Generator	Keysight	N5171B-506	MY53051692	2020/06/22	2021/06/22
11	Temperature Humidity Chamber	Yiheng	BPS-50CB	191005684	2020/12/07	2021/12/07
12	Temperature And Humidity Indicator	JianDaRenKe	Cos-03	0612058	2020/07/01	2021/07/01
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	2020/07/02	2021/07/02
16	Active Loop Antenna	BeiJing DaZe technology co. LTD	ZN30900C	15015	2020/03/31	2021/03/31
17	Double Ridged Horn antenna	A.H.Systems	SAS-574	588	2020/07/09	2021/07/09





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### 7 Test Photographs

Referring to - "Test Setup Photos of RC TOY (2008)".

### 8 Photos of the EUT

Referring to - "External Photos of RC TOY (2008)" and "Internal Photos of RC TOY (2008)".

### 9 Manufacturer/ Approval Holder Declaration

The following identical model(s):

2008, 2003, 2004, 2005, 2006, 2007, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 1336, 1340, 1706, 1818, 1912, 1912B, 1343A, 1343W, 1339A, 1339W, 1339W-VR, 1332A, 1332W, 1332W-VR, 1803, 1802, 1902, 1903, 1915, 1905-1, 1905-2, 1906, DB1-1, DB2-1, DB3-1, DB1-2, DB2-2, DB3-2, DB1-3, DB2-3, DB3-3, DB2-4, DB2-5, T10B, T11B, T12B, T13B, T15B, T16B, T17B, T18B, T19B, T20B, T30B, T31B, T32B, T33B, T35B, T36B, T37B, T38B, T39B, T40B

Belong to the tested device:

Product description: RC TOY Model No.: 2008

END OF TEST REPORT