

TEST REPORT



Applicant	GuangDong XinYu Technology Industrial Co., Ltd
Address	Laimei Industrial zone, Chenghai District, Shantou, Guangdong

Manufacturer or Supplier	GuangDong XinYu Technology Industrial Co., Ltd	
Address	Laimei Industrial zone, Chenghai District, Shantou, Guangdong	
Product	RC TOYS	
Brand Name	N/A	
Model	3433	
Additional Model & Model Difference	XQRC32-10AAA(3165), XQRC32-11AAA(3270); See items 2.1	
Date of tests	Apr. 22, 2015 ~ May 20, 2015	

The submitted sample of the above equipment has been tested according to the following European Directive - Radio Equipment and Telecommunications Terminal Equipment directive 1999/5/EC article 3.2 and the requirements of the following standards:

- EN 300 220-1 V2.4.1 (2012-05)
- EN 300 220-2 V2.4.1 (2012-05)

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Tested by Heise Chen Project Engineer / EMC Department	Approved by Glyn He Supervisor / EMC Department
	 Date: May 21, 2015

This report is for your exclusive use. 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. 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. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification.



Table of Contents

RELEASE CONTROL RECORD..... 4

1 SUMMARY OF TEST RESULTS..... 5

1.1 MEASUREMENT UNCERTAINTY 6

1.2 MAXIMUM MEASUREMENT UNCERTAINTY 6

2 GENERAL INFORMATION 7

2.1 GENERAL DESCRIPTION OF EUT 7

2.2 TEST INSTRUMENTS 8

2.3 DESCRIPTION OF TEST MODES..... 9

2.4 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL 9

2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS..... 11

2.6 DESCRIPTION OF SUPPORT UNITS 11

3 TEST PROCEDURES AND RESULTS..... 12

3.1 FREQUENCY ERROR OR FREQUENCY DRIFT 12

3.1.1 LIMITS OF FREQUENCY ERROR 12

3.1.2 TEST PROCEDURE 12

3.1.3 DEVIATION FROM TEST STANDARD 12

3.1.4 TEST SETUP 12

3.1.5 TEST RESULTS..... 13

3.2 EFFECTIVE RADIATED POWER 14

3.2.1 LIMITS OF EFFECTIVE RADIATED POWER..... 14

3.2.2 TEST PROCEDURE 14

3.2.3 DEVIATION FROM TEST STANDARD 14

3.2.4 TEST SETUP 14

3.2.5 TEST RESULTS..... 14

3.3 TRANSIENT POWER..... 15

3.3.1 LIMITS OF TRANSIENT POWER 15

3.3.2 TEST PROCEDURE 15

3.3.3 DEVIATION FROM TEST STANDARD 15

3.3.4 TEST SETUP 15

3.3.5 TEST RESULTS..... 16

3.4 MODULATION BANDWIDTH FOR WIDE BAND EQUIPMENT 17

3.4.1 LIMITS OF MODULATION BANDWIDTH 17

3.4.2 TEST PROCEDURE 17

3.4.3 TEST SETUP 17

3.4.4 TEST RESULTS..... 18

3.5 TRANSMITTER SPURIOUS EMISSIONS 20

3.5.1 LIMITS OF TRANSMITTER SPURIOUS EMISSIONS..... 20

3.5.2 TEST PROCEDURE 20

3.5.3 DEVIATION FROM TEST STANDARD 20

3.5.4 TEST SETUP 20

3.5.5 TEST RESULTS..... 21

3.6 FREQUENCY STABILITY UNDER LOW-VOLTAGE CONDITIONS 24

3.6.1 LIMITS OF FREQUENCY STABILITY UNDER LOW-VOLTAGE CONDITIONS..... 25

3.6.2 TEST PROCEDURES 25

3.6.3 TEST SETUP 25

3.6.4 TEST RESULTS..... 26



**BUREAU
VERITAS**

Test Report No.: RE150422N056

3.7 RECEIVER SPURIOUS EMISSIONS.....27

 3.7.1 LIMITS OF RECEIVER SPURIOUS EMISSIONS.....27

 3.7.2 TEST PROCEDURE27

 3.7.3 DEVIATION FROM TEST STANDARD27

 3.7.4 TEST SETUP27

 3.7.5 TEST RESULTS.....28

3.8 BLOCKING30

 3.8.1 LIMIT OF BLOCKING30

 3.8.2 TEST PROCEDURES.....30

 3.8.3 DEVIATION FROM TEST STANDARD30

 3.8.4 TEST SETUP30

 3.8.5 TEST RESULTS31

4 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB 32



Test Report No.: RE150422N056

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RE150422N056	Original release	May 21, 2015

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: ETSI EN 300 220-1, ETSI EN 300 220-2		
CLAUSE IN ETSI EN 300 220-2	TEST PARAMETER	RESULT
TRANSMITTER PARAMETERS		
4.2.1.1	Frequency Error or Frequency Drift	PASS
4.2.1.3	Effective Radiated Power	PASS
4.2.1.5	Transient power	PASS
4.2.1.7	Modulation bandwidth	PASS
4.2.1.8	Unwanted emissions in the spurious domain	PASS
4.2.1.8	Frequency Stability Under Low- voltage Conditions	PASS
4.2.1.10	Duty Cycle	Not Applicable
RECEIVER PARAMETERS		
4.3.5	Blocking	PASS
4.3.7	Receiver spurious radiation	PASS



1.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT:

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

PARAMETER	UNCERTAINTY
Radio frequency	$\pm 2.06 \times 10^{-7}$
Adjacent channel power	$\pm 0.837 \text{ dB}$
Radiated emission of transmitter, valid up to 6GHz	$\pm 3.294 \text{ dB}$
Radiated emission of receivers, valid up to 6GHz	$\pm 3.294 \text{ dB}$
Temperature	$\pm 1^\circ \text{C}$
Humidity	$\pm 10 \%$

1.2 MAXIMUM MEASUREMENT UNCERTAINTY

For the test methods, according to ETSI EN 300 220 standard, the measurement uncertainty figures shall be calculated in accordance with TR 100 028-1 [4] and shall correspond to an expansion factor (coverage factor) k = 1.96 or k = 2 (which provide confidence levels of respectively 95 % and 95.45 % in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian)).

Maximum measurement uncertainty

PARAMETER	UNCERTAINTY
Radio frequency	$\pm 1 \times 10^{-7}$
Adjacent channel power	$\pm 3.0 \text{ dB}$
Radiated emission of transmitter, valid up to 6GHz	$\pm 6.0 \text{ dB}$
Radiated emission of receivers, valid up to 6GHz	$\pm 6.0 \text{ dB}$
Temperature	$\pm 1^\circ \text{C}$
Humidity	$\pm 10 \%$



2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	RC TOYS			
MODEL	3433			
ADDITIONAL MODEL	XQRC32-10AAA(3165), XQRC32-11AAA(3270)			
NOMINAL VOLTAGE	TX: DC 9V from Battery RX: DC 4.5V(1.5V*AAA*3) from Battery			
OPERATING VOLTAGE RANGE	TX	$V_{nom}=9V$	$V_{min}=7.65V$	$V_{max}=10.35V$
OPERATING TEMPERATURE RANGE	-10°C ~ 55°C			
MODULATION TYPE	ASK			
OPERATING FREQUENCY	27.145MHz			
NUMBER OF CHANNEL	1			
ERP POWER	-32.49dBm			
ANTENNA TYPE	Wire Antenna			
CABLE SUPPLIED	N/A			
I/O PORTS	Refer to the user's manual			

NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. For the test results, the EUT had been tested with all conditions, but only the worst case was shown in test report.
3. Please refer to the EUT photo document (Reference No.: 150422N056) for detailed product photo.
4. Additional models XQRC32-10AAA(3165), XQRC32-11AAA(3270) are identical with the test model 3433 except the model no., color and silk-screen about appearance for trading purpose.

2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Spectrum Analyzer	Agilent	E4446A	MY46180622	Apr. 29,15	Apr. 28,16
Spectrum Analyzer (10Hz-40GHz)	Rohde&Schwarz	FSV40	101003	Apr. 07,15	Apr. 06,16
Signal Analyzer	Rohde&Schwarz	FSV7	102331	Nov. 05,14	Nov. 04,15
EMI Test Receiver	Rohde&Schwarz	ESVS10	841431/004	May 17,15	May 16,16
Loop antenna (9kHz~30MHz)	Daze	ZN30900A	0708	Dec. 05,14	Dec. 05,15
Bilog Antenna	Teseq	CBL 6111D	30643	Jul. 25, 14	Jul. 24, 15
Horn Antenna (1GHz -18GHz)	ETS -Lindgren	3117	00062558	May 30,14	May 29,15
Horn Antenna (15GHz-40GHz)	SCHWARZBECK	BBHA 9170	BBHA9170147	Jan. 21,15	Jan. 20,16
Signal Amplifier	Agilent	8447D	2944A10488	Jun. 25,14	Jun. 24,15
Pre-Amplifier (100MHz-26.5GHz)	Agilent	8449B	3008A00409	May 13,15	May 12,16
Pre-Amplifier (18GHz-40GHz)	EMCI	EMC 184045	980102	Nov. 20,14	Nov. 19,15
Digital Multimeter	FLUKE	15B	A1220010DG	Oct. 27,14	Oct. 26,15
Peak and Avg Power Sensor	Anritsu	MA2411B	1126068	Feb. 20,15	Feb. 19,16
Power Meter	Anritsu	ML2495A	1139001	Feb. 20,15	Feb. 19,16
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	NSEMC003	Apr. 19,14	Apr. 18,16
Humid & Temp Programmable Tester	Haida	HD-2257	110807201	Sep.04,14	Sep. 03,15

NOTE:

1. The calibration interval of the above test instruments is 12 months or 24 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in 966 Chamber and RF Oven room.
3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.

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