DAT-P-174/04-00

NO.L0447

Registration No.612767

TEST REPORT

Report No.: SRMC2008-H024-E0021

Product Name: Wireless Thermometer Receiver

Product Model: RCV-53591

Manufacture: Competition-Pool Inc.

Specification: FCC Part 15

RSS-210 Issue 7 (RSS-Gen Issue 2)

FCC ID: VXRRCV53591

IC ID: 7597A-RCV53591

The State Radio Monitoring Center, Equipment Testing Division

The State Radio Spectrum Monitoring and Testing Center

No.80 Beilishi Road Xicheng District Beijing, China

Tel: 86-10-68009202 Fax: 86-10-68009205

CONTENTS

1 General Information

1.1 Notes of the test report

The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written permission or The State Radio Monitoring Center.
The test results relate only to individual items of the samples which have been tested.

1.2 Information about the testing laboratory

Company:	The State Radio Monitoring Center, Equipment Testing Division The State Radio Monitoring and Testing Center
Address:	No.80 Beilishi Road, Xicheng District, Beijing China
City:	Beijing
Country or Region:	China
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Tel:	+86 10 68009181 +86 10 68009202
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Email:	Wangjf@srrc.org.cn
Accreditations:	FCC Registration Number 612767 Canada Registration Number 7308A

1.3 Applicant's details

Company Name:	COMPETITION-POOL INC.
Address:	12775 rue Brault, Mirabel, Qc, Canada, J7J 0C4

1.4 Manufacturer's details

Company Name:	COMPETITION-POOL INC.
Address:	12775 rue Brault, Mirabel, Qc, Canada, J7J 0C4

1.5 Application details

Date of receipt of application: 10 Dec. 2007
Date of receipt of test sample: 4 May 2008
Date of test: 8 May 2008

1.6 Reference specification

FCC Part 15: 2006
RSS-210 Issue 7: 2007(RSS-Gen Issue 2: 2007)

1.7 Information of EUT

MAIN EUT	
MANUFACTURING DESCRIPTION	Wireless Thermometer Receiver operating on frequency 433.92MHz
MANUFACTURER	Competition-Pool Inc.
TYPE	RCV-53591
HARDWARE VERSION	5459
SOFTWARE VERSION	VR2.0
TRANSMITTER OPERATING RANGE	N/A
RECEIVER OPERATING RANGE	433.92MHz
COUNTRY OF ORIGIN	China
INTERMEDIATE FREQUENCIES	None
OUTPUT POWER (mW or dBm)	**N/A**
FCC ID	VXRRCV53591
INDUSTRY CANADA ID	7597A-RCV53591
TECHNICAL DESCRIPTION (a brief description of the intended use and operation)	The Equipment Under Test (EUT) was a short range device which working in 433.92MHz using for detecting the temperature of the swimming pool then sending to the receiver by every 5 minutes.
POWER SUPPLY	
MANUFACTURING DESCRIPTION	The transmitter and receiver were powered by 2 AA new batteries respectively

1.8 Test Environment and Configuration

Environment	Temperature(℃)	Humidity(%)	Atmospheric Pressure(mbar)
Ambient	+25	42	1020

Normal Supply Voltage (Vdc)	3.0

Configuration	The receiver was powered by two AA batteries and in receiving signal mode for radiation emission testing.

2 Test information

2.1 Summary of the test results:

A brief summary of the tests carried out is shown below.

FCC Part 15B and RSS-210 Issue 7 (RSS-Gen Issue 2)

Test	FCC Specification	RSS Specification	Test Description	Result
2.2	Part 15.109	RSS-Gen	Radiated Emissions	Pass

This Test Report Is Issued by:	Checked by:
Tested by: 赵扬	Issued date: 2008.5.13

2.2 RADIATED EMISSIONS

2.2.1 Specification Reference

FCC Part 15 Subpart B, Section 15.109
RSS-Gen section 6

2.2.2 Equipment Under Test

Wireless Thermometer Receiver RCV-53591 working in configuration in section 1.8.

2.2.3 Date of Test

8 May 2008

2.2.4 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.2.5 Test Procedure

The test set-up was made in accordance to the general provisions of ANSI C63.4-2003.

The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna.

The radiated emissions measurements were made in a typical installation configuration.

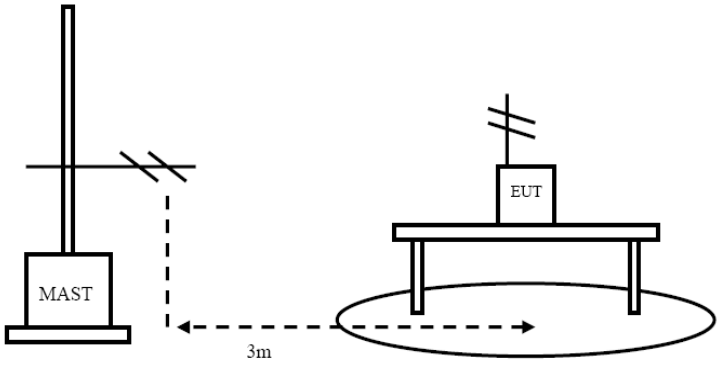
Then start the test software ES-K1. Sweep the whole frequency band through the range from 30MHz to 1GHz or above, using receive log period antenna HL562 or Ridge horn antenna HF906.

Frequency Range	RBW	VBW
30 – 1000 MHz	120 KHz	300 KHz
1 G –4. 5 G Hz	1 MHz	3 MHz

During the test, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turn table shall be rotated from 0 to 360 degrees for detecting the maximum of radiated spurious signal level.

The measurements shall be repeated with orthogonal polarization of the test antenna.

The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing.



2.2.6 Test Results

There is no emission detected above the noise floor which was at least 10dB below the limit. For the test result please see plot in Section 4.

Remarks

The equipment complies with the radiated spurious limits of 15.109 (a) or RSS-Gen section 6.

2.2.7 Test Limit

FCC 15.109, RSS-Gen Table 1	
Frequency	Field Strength at 3m
30-88MHz	40.0 dB(μV/m)
88-216MHz	43.5(μV/m)
216-960MHz	46.0(μV/m)
Above 960MHz	54.0(μV/m)

3 TEST EQUIPMENT AND MEASUREMENT UNCERTAINTY

3.1 Test Equipment

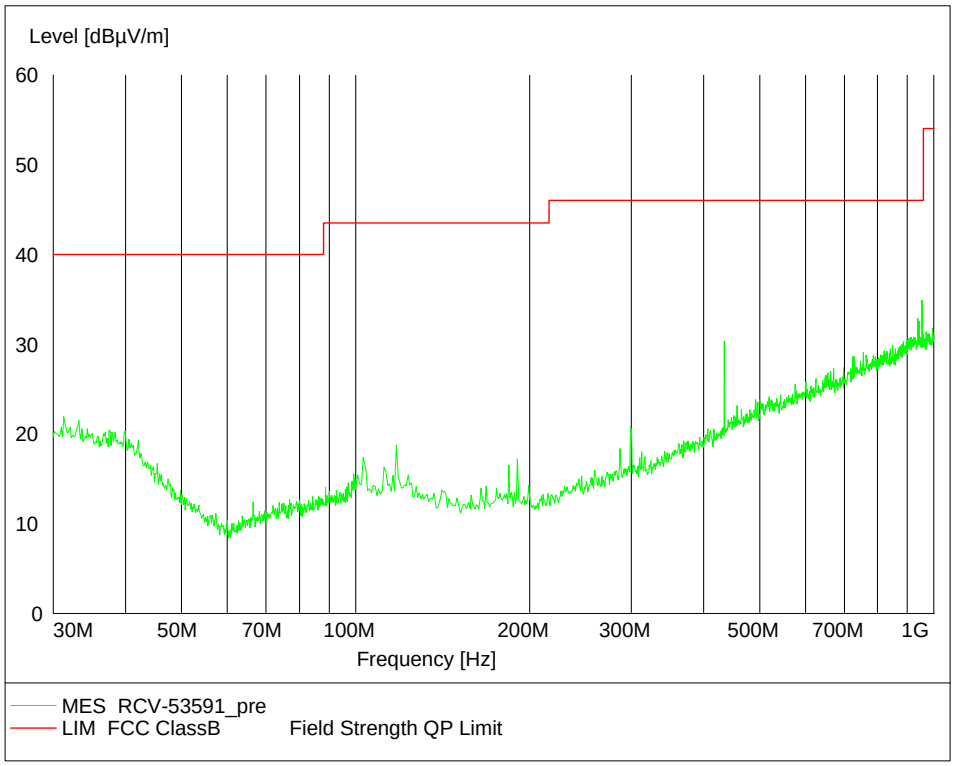
Instrument	Manufacturer	Type No	TE Number	Calibration Due
Test Receiver	Rohde & Schwarz	ESI 40	100015	Aug. 2008
Ultra log test antenna	Rohde & Schwarz	HL562	100016	Aug. 2008
Double-Ridged Waveguide Horn Antenna	Rohde & Schwarz	HF 906	100030	Aug. 2008
Turn Table	FRANKONIA	PS2000	--	Aug. 2008
Antenna Master	FRANKONIA	MA260	--	Aug. 2008
EMI test software	Rohde & Schwarz	ES-K1	--	Aug. 2008
Semi-Anechoic Chamber	FRANKONIA	23.18m×16.88m×9.60 m	--	Aug. 2008
Hygrometer	AZ	8705	9151665	Dec. 2008

3.2 MEASUREMENT UNCERTAINTY

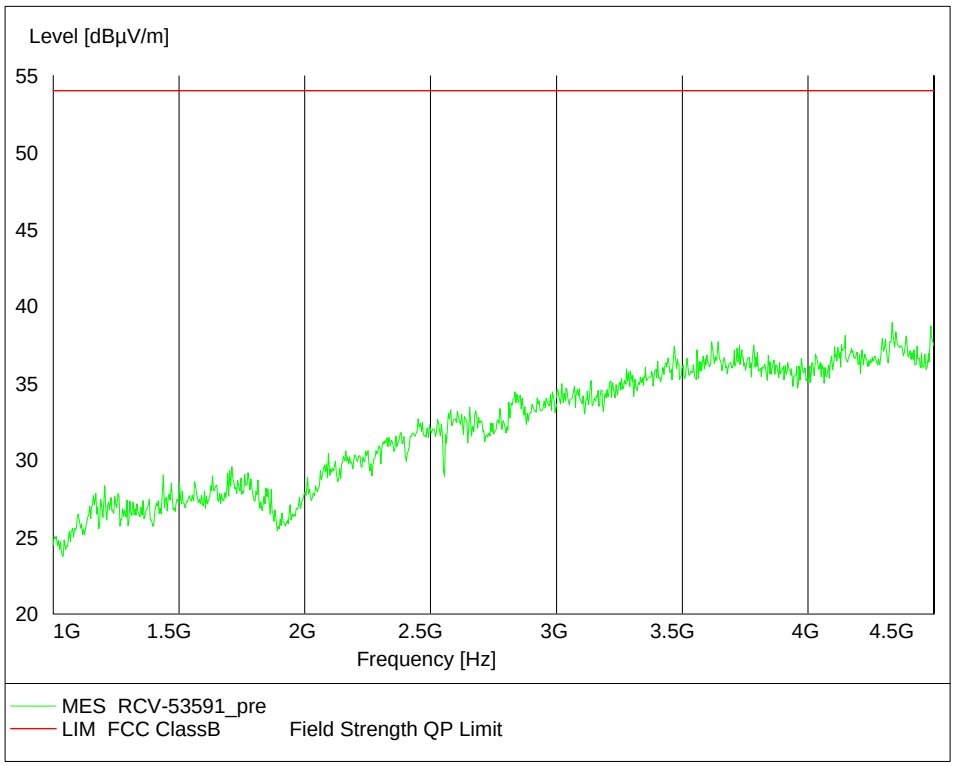
For a 95% confidence level, the measurement uncertainties for defined systems are:-

Test Discipline	Frequency / Parameter	MU
Radiated Emissions, Bilog Antenna,	30MHz to 1GHz Amplitude	3.1dB
Radiated Emissions, Horn Antenna,	1GHz to 40GHz Amplitude	3.3dB

4 PLOTS OF TEST RESULTS



Plot1 Emission 30MHz- 1GHz



Plot2 Emission 1GHz- 4.5GHz

APPENDIX

Appendix1 test setup