# 國際電器認證中心有限公司 International Electrical Certification Centre Ltd.

提供電器產品測試國際認證及諮詢服務 Technical Services in Electrical Product Testing, International Certification & Information

Agent of (pkm)

FCC ID: L9G47820R

# **Exhibit 1 - Test Report**



# F C C TEST REPORT

REPORT NO.: 15933/8/400F



## FCC - Test Report

No. 15933/8/400F

Date: 1998-04-16

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# FCC listed testlab acc. to Section 2.948 of the FCC - Rules

in compliance with the requirements of ANSI C63.4 - 1992

Product

R/C Toy Receiver

Model

47820R

Additional Model: 47810R

Importer

ARTIN INDUSTRIAL CO LTD

Manufacturer:

ARTIN INDUSTRIAL CO LTD



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# LABORATORY - REPORT

APPLICANT:

ARTIN INDUSTRIAL CO LTD

ADDRESS:

2/F, Lee Sum Factory Building

21-25 Sze Mei Street San Po Kong, Kowloon

HONG KONG

DATE OF SAMPLE RECEIVED: 1998-03-30

DATE OF TESTING:

1998-04-09

**DESCRIPTION OF SAMPLE:** 

Product:

R/C Toy Receiver

Manufacturer:

ARTIN INDUSTRIAL CO LTD

Model number:

47820R

Additional model number: 47810R

Rating:

DC 9V ('AA' Size Battery x 6)

Country of Origin:

P.R. CHINA

INVESTIGATIONS

REQUESTED:

Measurements to the relevant clauses of F.C.C. Rules and Regulations

Part 15 Subpart B – 'Unintentional Radiators'

**RESULTS:** 

See the attached test sheets

CONCLUSIONS

From the measurement data obtained, the tested sample was considered to have COMPLIED with the requirements for the relevant clauses of

Federal Communications Commission Rules as specified above.



Remark: Purpose of those tests in this report is to provide the applicant with the necessary test data of their device for the submission to FCC with application for Equipment Authorization under the FCC Equipment Authorization Program. The tests themselves are not Approval Tests



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# **Summary of Test Results**

#### **Interference Radiation:**

Test result:

O.K.

Test data:

See attached data sheet

#### Interference Voltage:

Test result:

N.A.

Test data:

N.A.



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# TEST EQUIPMENT LIST

Equipment	Manufacturer	Model	Serial Number	Remark		
Test Receiver	Rohde & Schwarz	ESH 3	863497/015	10KHz – 30MHz		
Test Receiver	Rohde & Schwarz	ESVP	860688/022	25MHz - 1,300 MHz		
Artificial Mains Network (LISN)	Network (LISN)			2 x 10A, 50Ω, 50μH 10KHz 30MHz		
Antenna System				30MHz – 1000MHz		
Antenna Mast System	Schwarzbeck	AM9104		Max. 4 meters height		
Spectrum Analyzer with Q. Peak	Tektronix	2712	B023006	9KHz – 1.8GHz		
Interface for Spectrum 2712	Tektronix	TD3F14A				
Test Receiver	Rohde & Schwarz	ESH 3	892580/006	10KHz – 30MHz		
Test Receiver	Rohde & Schwarz	ESVP	863512/012	25MHz – 1,300 MHz		
mpulse Limiter	Rohde & Schwarz	ESH-3-Z2				
Artificial Mains Network (LISN)	Schwarzbeck	NSLK 8127		2 x 10A, 50Ω, 50μH 10KHz- 30MHz		
Antenna System	Schwarzbeck	BBA 9106 / UHALP 9107		30MHz – 1000MHz		
Signal Generator	Rohde & Schwarz	SWS 2	879113/42	100KHz – 1040 MHz		
Digital Multimeter	tal Multimeter Tektronix		DM- 2510GTW10555	10KHz – 30MHz		
urntable with ontroller	Drehtisch	DT312		ф120 cm		



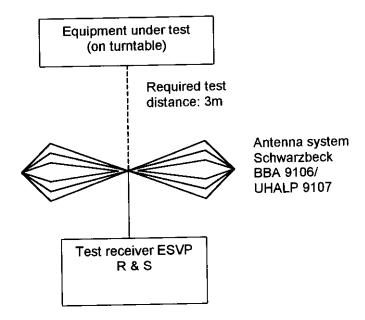
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### Radiated Emission Testprocedure





### **Unintentional Radiators**

International Electrical Certification Centre Ltd.

Measurement of Radiated Emissions (30MHz-1000MHz)

Acc: FCC Part 15 Subpart B

IECC Ref:

15933/8/400F

Model:

47820R

Applicant:

ARTIN INDUSTRIAL CO LTD

Ser.Nr.:

-

Set under test:

Connected sets:

Operating mode:

1

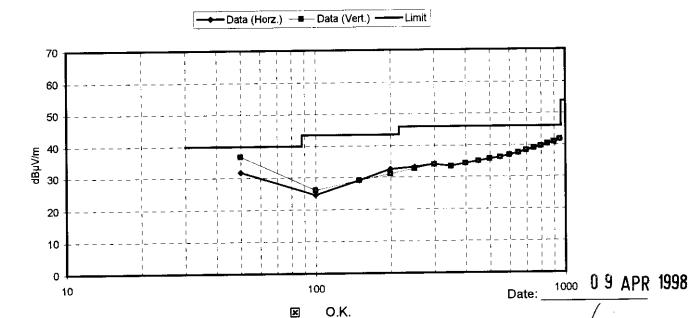
R/C Toy Receiver
Power "On"

Test Equipment

Receiver: ESVP Rohde & Schwarz Antenna: Schwarzbeck BBA 9106

and UHALP 9107

Frequency (MHz)	Н	orz. Reading dΒ(μV)	Ve	ert. Reading dΒ(μV)	Antenna Factor (dB)	Н	oriz. Test Result (μV/m)	Vert. Test Result (μV/m)	Limit (μV/m)
49.86		24		29	7.7		38.6	68.7	100.0
99.72	<u> </u>	16		17.5	8.5		16.9	20.1	150.0
149.58	<	16	<	16	13.0	<	28.2	< 28.2	
199.44		17.5	<	16	15.1	] _	42.6	< 35.8	
249.3		16.5	<	16	16.7		45.6	< 43.1	200.0
299.16	<b> </b> <	16	<	16	18.0	<	50.0		
349.02	<b> </b> <	16	<	16	17.4	<	46.7	< 46.7	200.0
398.88	<	16	<	16	18.3	<	51.8		
448.74	<	16	<	16	19.0	<		< 56.1	200.0
498.6	<b> </b> <	16	<	16	19.7	<	60.8		
548.46	<	16	<	16	20.2	<u> </u>	64.5		
598.32	<	16	<	16	20.9	<	69.8		
648.18	<	16	<	16	21.6	<	75.6		
698.04	7	16	<	16	22.4	<	82.9		
747.9	<	16	<	16	23.0	<	89.6		
797.76	<	16	<	16	23.7	<	96.3		
847.62	<	16	<	16	24.3	<	104.0		
897.48	<	16	<	16	25.0	<u> </u>	111.8		
947.34	<	16	<	16	25.7	<u> </u> <	122.0	< 122.0	200.0





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#### **Notes for Radiation Measurement**

1. Measurement facility:

Measurement facility located at Fanling (Hong Kong), placed on file with the FCC Pursuant to Section 2.948 of the FCC Rules.

2. Distance between the EUT and measuring antenna:

3 meters.

3. Measuring instrumentations:

Rohde & Schwarz ESVP Test Receiver ( 20 - 1300 MHz ) with a CISPR weighting QP detector, 6 dB bandwidth set at 120 KHz.

4. Measuring antenna:

Broad-band antenna for the frequency range 30 - 300 MHz and frequency range 300 - 1000 MHz, connected with 10 meters coaxial cable. Cable loss of the coaxial cable included in the Antenna Factor for measurement data. The antennas are capable of measuring both horizontal and vertical polarizations.

5. Frequency range scanned:

The frequency range 30 - 1000 MHz has been scanned. Readings of the highest emissions relating to the limit were reported as above.

6. Arrangement of EUT:

During the test, the sample was operated at rated supply voltage and arranged for maximum emissions.

7. Measuring Procedure:

In accordance with the relevant sections of the American National Standards Institute (ANSI) C63.4-1992 'Methods of Measurement of Radio Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9KHz to 40GHz'.