

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

提供電器產品則該圖察認證及諮詢服務 Technical Services in Electrical Product Testing, International Certification & Information



FCC ID: L9@99COT

Exhibit 1 - Test Report



F C C TEST REPORT

REPORT NO.: 15778/8/400F



FCC - Test Report

No. 15778/8/400F

Date: 1998-06-24

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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 Road Race Set -- 49 MHz

Transmitter

Model

9900

Applicant

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: 1998-06-18

DATE OF TESTING:

1998-06-23

DESCRIPTION OF SAMPLE:

Product:

R/C Road Race Set -- 49 MHz Transmitter

Manufacturer:

ARTIN INDUSTRIAL CO LTD

Model number:

9900

Rating:

Battery: DC 9V ('6F22' Size x 1)

Country of Origin:

P.R. CHINA

INVESTIGATIONS REQUESTED:

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

Part 15 Subpart C - Intentional 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.

Measurement of Emissions within Band Edges

Test result:

O.K.

Test data:

See attached data sheet



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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) | Schwarzbeck | NSLK 8127 | | 2 x 10A, 50Ω, 50μH 10KHz-30MHz | |
| Antenna System | Schwarzbeck | BBA 9106 / UHALP 9107 | | 30MHz – 1000MHz | |
| Antenna Mast Schwarzbeck System | | AM9104 | | Max. 4 meters height | |
| Spectrum Analyzer with Q. Peak | Tektronix | 2712 | B023006 | 9KHz – 1.8GHz | |
| Interface for Spectrum 2712 | | TD3F14A | | | |
| Test Receiver | Rohde & Schwarz | ESH 3 | 892580/006 | 10KHz – 30MHz | |
| Test Receiver Rohde & Schwarz | | ESVP | 863512/012 | 25MHz – 1,300 MHz | |
| Impulse 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 | Generator Rohde & SWS | | 879113/42 | 100KHz – 1040 MHz | |
| Digital Multimeter | Tektronix | DM2510G | DM- 2510GTW1055 5 | 10KHz – 30MHz | |
| Turntable with Controller | Drehtisch | DT312 | | ф120 cm | |



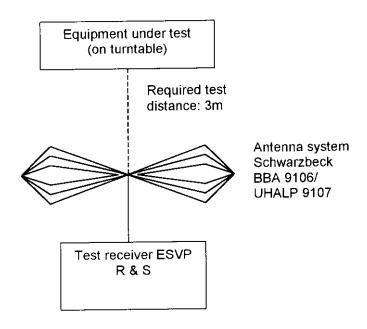
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Radiated Emission Test Procedure





Interference Radiation

Measurement of Radiated Emissions (30MHz-1000MHz)

International Electrical Certification Centre Ltd. Acc: FCC Part 15 Subpart C

IECC Ref: 15778/8/400F

Model: 9900
Applicant: ARTIN INDUSTRIAL CO LTD

Ser.Nr.: 1

Set under test: R/C Road Race Set

Connected sets: -

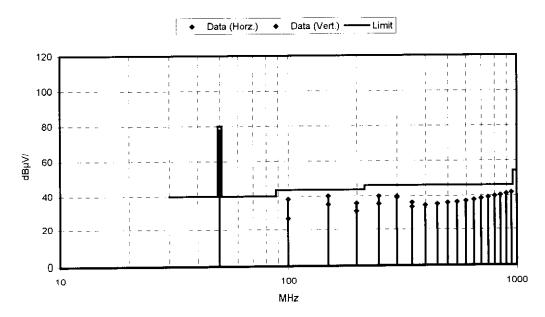
Operating mode: Power "On" (Transmitter)

Test Equipment

Receiver: ESVP Rohde & Schwarz Antenna: Schwarzbeck BBA 9106

and UHALP 9107

| | Frequency (MHz) | Horz. Reading dB(μV) | R | Vert. eading IB(µV) | Antenna Factor (dB) | Horiz. Test Result (μV/m) | Vert. Test Result (µV/m) | Limit (μV/m) |
|----------|-----------------|-------------------------|---|---------------------------|---------------------------|---------------------------------|--------------------------------|--------------|
| Peak | 49.86 | 63 | | 70 | 7.0 | 3178 | 7115 | 100,000 |
| Av. | 49.86 | 61 | | 69.1 | 7.0 | 2525 | 6415 | 10000 |
| Harm. 2 | 99.72 | 29.5 | | 18 | 8.5 | 80 | 21 | 150 |
| Harm. 3 | 149.58 | 27 | | 22 | 13.0 | 100 | 56 | _ |
| Harm. 4 | 199.44 | 20.5 | < | 16 | 15.1 | 60 | < 36 | 150 |
| Harm. 5 | 249.3 | 23 | | 18.5 | 16.7 | 96 | 57 | 200 |
| Harm. 6 | 299.16 | 21.5 | | 21 | 18.0 | 94 | | 200 |
| Harm. 7 | 349.02 | 18.5 | < | 16 | 17.4 | 62 | | 200 |
| Harm. 8 | 398.88 | < 16 | < | 16 | 18.3 | < 52 | | 200 |
| Harm. 9 | 448.74 | < 16 | < | 16 | 19.0 | < 56 | | |
| Harm. 10 | 498.6 | < 16 | < | 16 | 19.7 | < 61 | < 61 | 200 |
| Harm. 11 | 548.46 | < 16 | < | 16 | 20.2 | < 64 | | 200 |
| Harm. 12 | 598.32 | < 16 | < | 16 | 20.9 | < 70 | | 200 |
| Harm. 13 | 648.18 | < 16 | < | 16 | 21.6 | < 76 | | |
| Harm. 14 | 698.04 | < 16 | < | 16 | 22.4 | < 83 | | 200 |
| Harm. 15 | 747.9 | < 16 | < | 16 | 23.0 | < 90 | | |
| Harm. 16 | 797.76 | < 16 | < | 16 | 23.7 | < 96 | | 200 |
| Harm. 17 | 847.62 | < 16 | < | 16 | 24.3 | < 104 | | 200 |
| Harm. 18 | 897.48 | < 16 | < | 16 | 25.0 | < 112 | | 200 |
| Harm. 19 | 947.34 | < 16 | < | 16 | 25.7 | < 122 | < 122 | 200 |



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⋈ 0.K.



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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 - 5000 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'.



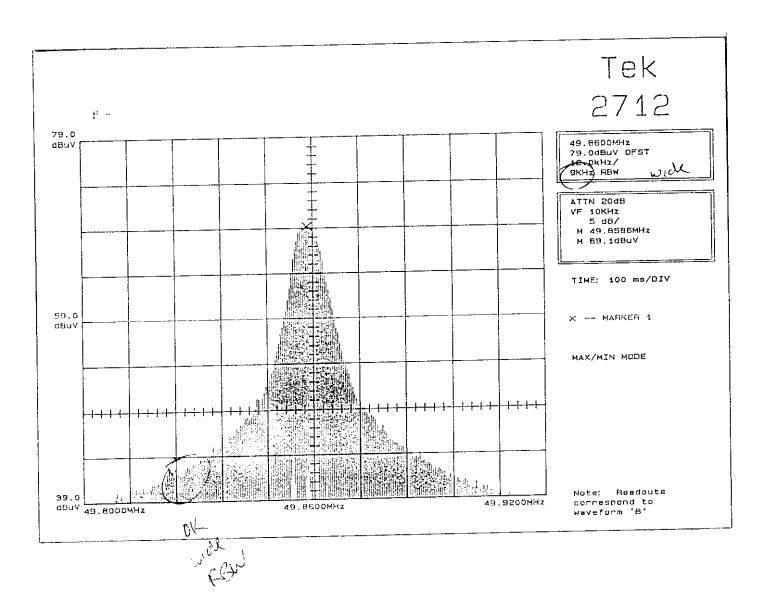
Measurement of Emissions within band edges

Test Equipment Spectrum Analyzer: Tektronix 2712

International Electrical Certification Centre Ltd.

Acc: FCC Part 15 Subpart C

| IECC Ref: | 15778/8/400F 9900 ARTIN INDUSTRIAL CO LTD | | | | | |
|----------------------|---|--|--|--|--|--|
| Model: Applicant: | | | | | | |
| . de la constant | | | | | | |
| Ser.Nr.: | 1 | | | | | |
| Set under test: | R/C Road Race Set | | | | | |
| Connected sets: | - | | | | | |
| Operating mode: | Power "On" (Transmitter) | | | | | |
| | | | | | | |



Test result:

✓ O.K.

□ Not O.K.



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Notes for Measurement of Emissions within Band Edges

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. Measuring instrumentations:

Spectrum Analyzer: Tektronix 2712

3. Frequency range scanned:

The frequency range acc. to FCC rules and regulations part 15 subpart C - Intentional Radiators.

4. Arrangement of EUT:

During the test, the sample was operated.

5. Measuring Procedure:

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