

**F C C -**

**TEST REPORT**

REPORT NO.: 29687B/2/400F

# FCC – Test Report

Date: 2002-04-22

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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** : Baby Monitor with Movement Sensor  
Mat

**Product Class** : Low Power Communication Device  
Receiver

**Model** : BC-2000

**Importer** : TECHWALL ELECTRONICS CO LTD

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## LABORATORY - REPORT

**APPLICANT:** TECHWALL ELECTRONICS CO LTD  
**ADDRESS:** 24/F., Tern Center, Tower 1  
237 Queen's Road  
Central  
HONG KONG

**DATE OF SAMPLE RECEIVED:** 2002-03-06

**DATE OF TESTING:** 2002-04-12

### DESCRIPTION OF SAMPLE:

Product: Baby Monitor with Movement Sensor Mat  
Product class: Low Power Communication Device Receiver  
Model number: BC-2000  
Rating: AC/DC Adaptor, Input : AC 120V 60Hz, Output : DC 7.5V, or DC 4.8V  
Rechargeable Batteries  
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.

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Authorized Signature

**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:** O.K.  
**Test data:** See attached data sheet

### PHOTOGRAPH OF THE SAMPLE



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## TEST EQUIPMENT LIST

Equipment	Manufacturer	Model	Serial No.	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 / NNLA 8119	--	2 x 10A, 50Ω, 50μH 10KHz-30MHz
Antenna System	Schwarzbeck	BBA 9106 / UHALP 9107	--	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
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	Rohde & Schwarz	SWS 2	879113/42	100KHz – 1040 MHz
Digital Multimeter	Tektronix	DM2510G	DM-2510GTW105 55	10KHz – 30MHz
Turntable with Controller	Drehtisch	DT312	--	φ120 cm

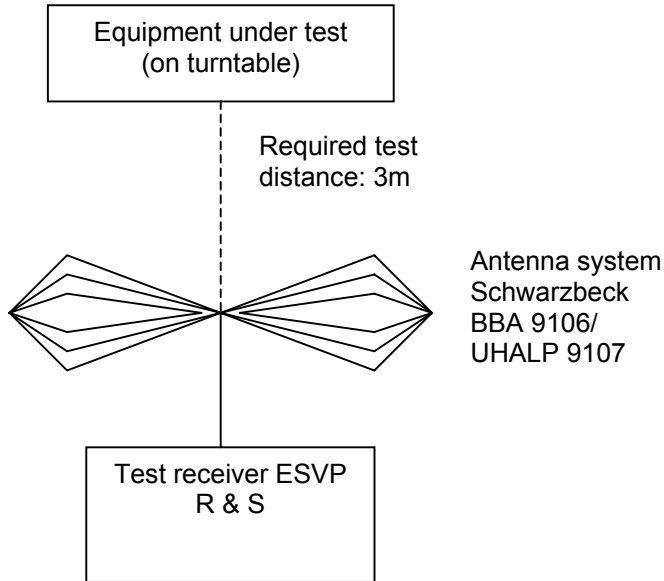
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## Radiated Emission Testprocedure (> 30MHz)



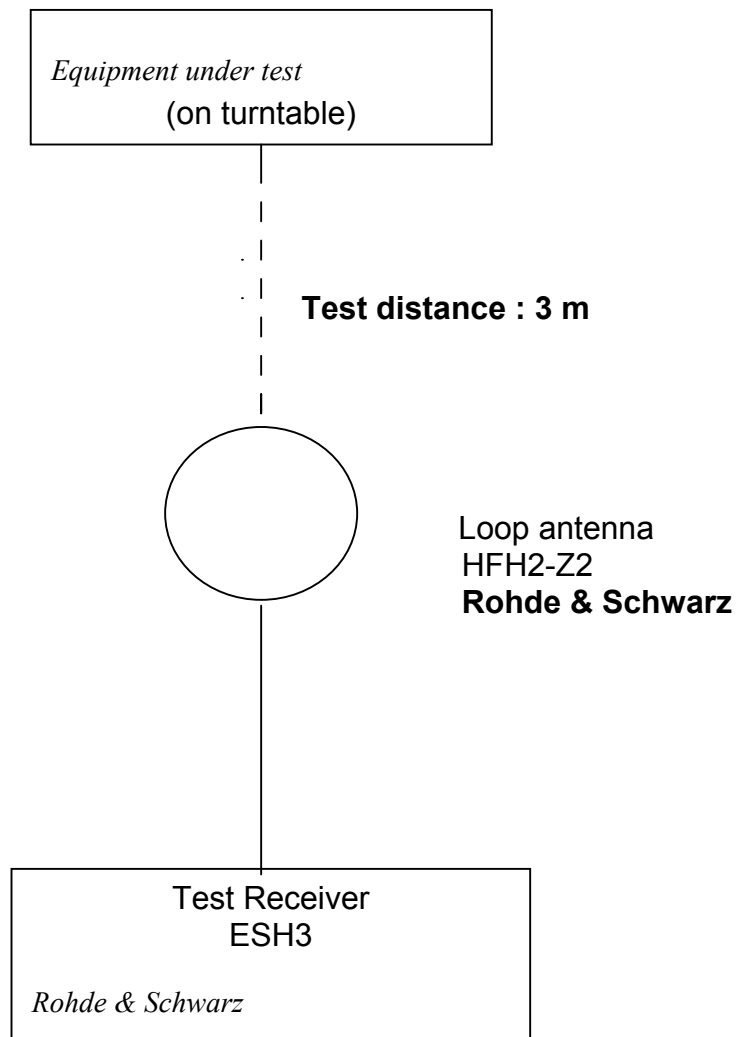
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## Radiated Emission Test Procedure ( 9kHz – 30MHz)





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## Radiation Measurement Data

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Create Data macro

FccRcvr49

U1

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## Radiation Measurement Data

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Create Data macro

FccRcvr49

U1

## **Cohere Plot at fundamental frequency**

### **Not Applicable**

- The design of the receiver is not super-regenerative type, cohere problem is not applicable.

## 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.

Loop antenna for the frequency range 9KHz – 30MHz, connected with 10 meters coaxial cable. Cable loss of the coaxial cable included in the measurement data. The center of the loop 1. m above the ground plane, positioned with its plane vertical at the specified distance and rotated about its vertical axis and placed horizontal for maximum response at each azimuth about the EUT.

**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. To find the maximum emission, the antenna was raised from 1 to 4 meters and was stopped at the maximum emission point.

**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'.

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## Radiation Measurement Data

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Create Data macro

FccRcvr49

U5/6

## Notes for Voltage Measurement

1. **LISN (Line Impedance Stabilization Network) used:**  
LISN in accordance with IEEE Standard 213.
  
2. **Measuring instrumentations:**  
Rohde & Schwarz ESH3 Test Receiver ( 9 KHz - 30 MHz ) with a CISPR weighting QP detector, 6 dB bandwidth set at 10 KHz.
  
3. **Frequency range scanned:**  
The frequency range 450 KHz - 30 MHz has been scanned. Readings of the highest emissions relating to the limit were reported as above.
  
4. **Setup of EUT:**  
Connection of equipment and operation conditions are the same as those in the Radiation measurement.
  
5. **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'