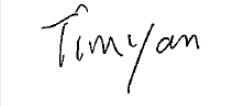


Test report No: 4913207.57

## TEST REPORT

### Radio Spectrum Matters (RF)

Identification of item tested	Connected Baby Monitor
Trademark	PHILIPS AVENT
Model and /or type reference	SCD971/xx, SCD973/xx (xx=00, 01, ..... , 99)
FCC/IC ID	FCC ID: 2AW4T-SCD97XBA; IC: 135T-SCD97XBA
HVIN	SCD971BA, SCD973BA
Features	Adaptor part (ASSA105A-050100): Input: 100-240 Vac, 50/60 Hz, 0,35 A, Output: 5.0 Vdc, 1.0 A, 5.0 W; BU part: Input: 5.0 Vdc, 1.0 A
Applicant's name / address	Philips Electronics Hong Kong Limited Level 19, Tower I, Grand Century Place, 193 Prince Edward Road West, Mongkok, Kowloon, Hong Kong
Test method requested, standard	KDB 447498 D01V06; FCC Part 1.1310; RSS-102: Issue 6
Verdict Summary	COMPLIANCE
Tested by (name & signature)	Harry Deng 
Approved by (name & signature)	Tim Yan 
Date of issue	2024-05-09
Report template No	TRF_EMС 2017-06- FCC_Exposure

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## GENERAL CONDITIONS

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA.
5. This report will not be used for social proof function in China market.

## UNCERTAINTY

For all measurements where guidance for the calculation of the instrumentation uncertainty of a measurement is specified in EN 55016-4-2 (CISPR 16-4-2), EN/IEC 61000-4 series or a product standard, the measurement instrumentation uncertainty has been calculated and applied in accordance with these standards.

Uncertainties have been calculated according to the DEKRA internal document. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95%.

## ENVIRONMENTAL CONDITIONS

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:

Ambient temperature	15 °C – 35 °C
Relative Humidity air	30% - 60%
Atmospheric pressure	86 kPa – 106 kPa

If explicitly required in the basic standard or applied product / product family standard the climatic values are recorded and documented separately in this test report.

## POSSIBLE TEST CASE VERDICTS

Test case does not apply to test object	N/A
Test object does meet requirement	P (Pass) / PASS
Test object does not meet requirement	F (Fail) / FAIL
Not measured	N/M

## DEFINITION OF SYMBOLS USED IN THIS TEST REPORT

<input checked="" type="checkbox"/> Indicates that the listed condition, standard or equipment is applicable for this report/test/EUT.			
<input type="checkbox"/> Indicates that the listed condition, standard or equipment is not applicable for this report/test/EUT.			
Decimal separator used in this report	<input type="checkbox"/>	Comma (,)	<input checked="" type="checkbox"/> Point (.)

## ABBREVIATIONS

For the purposes of the present document, the following abbreviations apply:

EUT	:	Equipment Under Test
QP	:	Quasi-Peak
CAV	:	CISPR Average
AV	:	Average
CDN	:	Coupling Decoupling Network
SAC	:	Semi-Anechoic Chamber
OATS	:	Open Area Test Site
BW	:	Bandwidth
AM	:	Amplitude Modulation
PM	:	Pulse Modulation
HCP	:	Horizontal Coupling Plane
VCP	:	Vertical Coupling Plane
$U_N$	:	Nominal voltage
$T_x$	:	Transmitter
$R_x$	:	Receiver
N/A	:	Not Applicable
N/M	:	Not Measured

## DOCUMENT HISTORY

Report nr.	Date	Description
4913207.57	2024-05-09	First release.

## REMARKS AND COMMENTS

The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).

## 1 GENERAL INFORMATION

### 1.1 General Description of the Item(s)

Description of the item .....	Connected Baby Monitor
Trademark.....	PHILIPS AVENT
Model / Type number .....	SCD971/xx, SCD973/xx (xx=00, 01, ..... , 99)
FCC/IC ID .....	FCC ID: 2AW4T-SCD97XBA; IC: 135T-SCD97XBA
HVIN .....	SCD971BA, SCD973BA
Ratings.....	Adaptor part (ASSA105A-050100):  Input: 100-240 Vac, 50/60 Hz, 0,35 A,  Output: 5.0 Vdc, 1.0 A, 5.0 W;  BU part:  Input: 5.0 Vdc, 1.0 A
Manufacturer.....	Philips Consumer Lifestyle B.V. Tussendiepen 4, 9206 AD Drachten, The Netherlands
Factory .....	Sky Light Electronic (ShenZhen) Limited No. 8 Building 1F-5F & 9 Building 1F-2F, AnTuoShan High-tech Industrial Park, XinSha Road, Shajing, Bao'An, 518104, Shenzhen, People's Republic of China

RF specification (base on client's declaration)

Operating frequency range(s).....	2412-2462 MHz (802.11 b/g/n HT20)
Type of Modulation .....	802.11b:DSSS(DBPSK/DQPSK/CCK); 802.11g/n:OFDM(BPSK/QPSK/16QAM/64QAM)
Maximum RF output power (conducted) .....	15.80 dBm
E.I.R.P. .....	8.09 dBm
Antenna type.....	Integral Antenna
Antenna gain.....	2.29 dBi
Number of channel .....	11 (802.11 b/g/n HT20)
Operating Temperature Range.....	0 - 40 °C

Rated power supply .....	Voltage and Frequency		Reference poles				
			L1	L2	L3	N	PE
	<input checked="" type="checkbox"/>	AC: 100-240 V, 50/60 Hz	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	DC:					
	<input type="checkbox"/>	Battery:					
Mounting position.....	<input type="checkbox"/>	Table top equipment					
	<input checked="" type="checkbox"/>	Wall/Ceiling mounted equipment					
	<input type="checkbox"/>	Floor standing equipment					
	<input type="checkbox"/>	Hand-held equipment					
	<input type="checkbox"/>	Other:					

Intended use of the Equipment Under Test (EUT)
The apparatus as supplied for the test is Connected Baby Monitor which intended for residential use, the product contains electronic circuitry but without earth connection.
According to manufacturer's declaration, models are identical except for the colour of appearance.
Letters xx can be 00 to 99 specified the product code which would not affect the EMC test result.
Hence, model SCD971/26 was chosen for full test and the corresponding test data are also representative of the other model as well.

## 1.2 Test data

Test Location	DEKRA Testing and Certification (Shanghai) Ltd. Guangzhou Branch Block 5, No.3, Qiyun Road, Huangpu District, Guangzhou, Guangdong, China FCC Designation Number: CN1324; ISED CAB identifier: CN0130
Date of receipt of test item	2022-04-12
Date (s) of performance of tests	2022-04-12 to 2022-05-12

## 1.3 The environment(s) in which the EUT is intended to be used

The equipment under test (EUT) is intended to be used in the following environment(s):

<input checked="" type="checkbox"/>	Residential (domestic) environment.
<input checked="" type="checkbox"/>	Commercial and light-industrial environment.
<input type="checkbox"/>	Industrial environment.

## 2 DESCRIPTION OF TEST SETUP

### 2.1 Operating mode(s) used for tests

During the tests the following operating mode(s) has(have) been used.

Operating mode	Operating mode description	Used for methos	
		Conducted	Radiated
1	Transmitting at 802.11b mode	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	Transmitting at 802.11g mode	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	Transmitting at 802.11n20 mode	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4		<input type="checkbox"/>	<input type="checkbox"/>

Supplemental information: ---

### 2.2 Port(s) of the EUT

Port name and description	Connected to / Termination	Cable		
		Length used during test [m]	Attached during test	Shielded
AC input	AC mains	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

Supplemental information: ---

### 2.3 Support / Auxiliary equipment / unit / software for the EUT

The EUT has been tested with the following auxiliary equipment / unit / software:

Auxiliary equipment / unit / software	Type / Version	Manufacturer	Supplied by
Laptop	Latitude 5488	DELL	DEKRA

Supplemental information: ---

### 2.4 Test Configuration / Block diagram used for tests

Refer to Annex 3.

### 3 RF EXPOSURE EVALUATION

#### 3.1 Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
300-1500	--	--	F/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500	--	--	F/1500	6
1500-100,000	--	--	1	30

F= Frequency in MHz

According to RSS 102 Issue 6: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in RSS 102 Clause 6.6 Field reference level exposure exemption limits

Field reference level (FRL) exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm (i.e. mobile devices), except when the device operates as follows:

- below 20 MHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than 1 W (adjusted for tune-up tolerance)
- at or above 20 MHz and below 48 MHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than  $4.49/f^{0.5}$  W (adjusted for tune-up tolerance), where  $f$  is in MHz
- at or above 48 MHz and below 300 MHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than 0.6 W (adjusted for tune-up tolerance)
- at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than  $1.31 \times 10^{-2} f^{0.6834}$  W (adjusted for tune-up tolerance), where  $f$  is in MHz
- at or above 6 GHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than 5 W (adjusted for tune-up tolerance)

### Friis Formula

Friis transmission formula:  $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

$P_d$  = power density in  $\text{mW/cm}^2$

$P_{out}$  = output power to antenna in  $\text{mW}$

$G$  = gain of antenna in linear scale

$\pi = 3.1416$

$R$  = distance between observation point and center of the radiator in  $\text{cm}$

$P_d$  is the limit of MPE,  $1 \text{ mW/cm}^2$  of FCC and  $0.54 \text{ mW/cm}^2$ . If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance  $r$  where the MPE limit is reached.

### 3.2 Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity:  $20^\circ\text{C}$  and 50% RH.

### 3.3 Test Result

#### Power Density:

Test Mode	Frequency Band (MHz)	Maximum EIRP (dBm)	Power Density at $R = 20 \text{ cm}$ ( $\text{mW/cm}^2$ )	Limit of Power Density $S(\text{mW/cm}^2)$
Mode 2 (The highest power)	2400 ~ 2483.5	18.09	0.012	1

#### FRL:

Test Mode	Frequency Band (MHz)	Maximum EIRP (dBm)	Maximum e.i.r.p mean power (W)	Limit (W)
Mode 2 (The highest power)	2400 ~ 2483.5	18.09	0.064	2.67

--- END ---