RF Exposure Evaluation Report

Product	:	Kami Baby Monitor
Trade mark	:	kami/ kami baby
Model/Type reference	:	YYS.5019
Serial Number	:	N/A
Report Number	:	EED32M00172004
FCC ID	:	2AFIB-YYS5019
Date of Issue	:	Jul. 10, 2020
Test Standards	:	47 CFR Part 1.1307 47 CFR Part 1.1310 KDB447498D01v06
Test result	:	PASS

Prepared for:

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Pilot Free Trade Zone , Shanghai, China, 20000

Prepared by:

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Date: Jul. 10, 2020

Check No.: 3915582838

2 Version

Version No.	Date	Description
00	Jul. 10, 2020	Original

3 Contents

4 General Information

4.1 Client Information

Applicant:	Shanghai Xiaoyi Technology Co., Ltd.
Address of Applicant:	Room 1608, No.515 huanke Road, China (Shanghai) Pilot Free Trade Zone , Shanghai, China, 20000
Manufacturer:	YI Technologies,Inc.
Address of Manufacturer:	Room 1608, No.515 huanke Road, China (Shanghai) Pilot Free Trade Zone , Shanghai, China, 20000

4.2 General Description of EUT

Product Name:	Kami Baby Monitor
Model No.(EUT):	YYS.5019
Trade Mark:	kami/ kami baby
EUT Supports Radios application	2.4G WiFi, 802.11b/g/n(20MHz)/n(40MHz) ,2412-2462MHz

4.3 Product Specification subjective to this standard

Frequency Range:	IEEE 802.11b/g/n(HT20): 2412MHz to 2472MHz IEEE 802.11n(HT40): 2422MHz to 2462MHz	
Modulation Type:	IEEE for 802.11b:DSSS(CCK,DQPSK,DBPSK) IEEE for 802.11g:OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE for 802.11n(HT20 and HT40): OFDM (64QAM, 16QAM,QPSK,BPSK)	
Number of Channels:	IEEE 802.11b/g, IEEE 802.11n HT20: 13 Channels IEEE 802.11n HT40: 9 Channels	
Test Power Grade:	B:30 / G:34 / N20:36 / N40:38 (manufacturer declare)	
Test Software of EUT:	secureCRT (manufacturer declare)	
Antenna Type:	FPC	
Antenna Gain:	4.67dBi	
Power Supply:	Adapter:	Input:100-240V 50/60Hz 0.35A Output 5V 2A Dongguan AOHAI power Technology co.LTD
	Battery:	N/A
Max Conducted Peak Output Power:	16.35dBm	
	The Max Conducted Peak Output Power data refer to the report EED32M00172003	
Sample Received Date:	Jun. 03, 2019	
Sample tested Date:	Jun. 03, 2019 to Aug. 02, 2019	
The tested sample(s) and the sample information are provided by the client. All test data come from the report of No.EED32L00138904, Updated product names and trademarks as well as applicant and manufacturer addresses		

4.4 Test Location

All tests were performed at:
Centre Testing International Group Co., Ltd
Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China
Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385
No tests were sub-contracted.
FCC Designation No.: CN1164

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.

5 RF Exposure Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 Limits

According to FCC Part1.1310: 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 part1.1307(b)

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*($900/f^2$)	6
30–300	61.4	0.163	1.0	6
300–1500	.....	.....	f/300	6
1500–100,000	.....	.....	5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*($180/f^2$)	30
30–300	27.5	0.073	0.2	30
300–1500	.....	.....	f/1500	30
1500–100,000	.....	.....	1.0	30

A rough estimation of the expected exposure in power flux density on a given point can be made with the following equation:

$$S = \frac{P \times G}{4 \times \pi \times R^2}$$

Where:

S = power density

P = power input to the antenna

G = numeric gain of the antenna in the direction of interest relative to an isotropic radiator

R= distance to the centre of radiation of the antenna

EIRP = P*G

The antenna of the product, under normal use condition is at least 20 cm away from the body of the user. Warning statement to the user for keeping at least 20cm separation distance and the prohibition of operating to a person has been printed on the user's manual. Therefore, the S of the device is calculated with R=20cm, and if it is below the limit S, then we can conclude the device complies with the rules.

5.1.2 Test Procedure

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

5.1.3 EUT RF Exposure Evaluation

Antenna Gain: 4.67dBi

Output Power Into Antenna & RF Exposure Evaluation Distance:

Channel	Frequency (MHz)	Max Conducted Peak Output Power(dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R (cm)	S (mW/cm^2)	Limit (mW/cm^2)	Result
Middle	2441	16.35	4.67	21.02	126.47	20	0.025	1.0	Pass

Note: Refer to report No. EED32M00172003 for EUT test Max Conducted Peak Output Power value.

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32M00170203 for EUT external and internal photos.

*** End of Report ***