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Fax: +86 (0) 755 2671 0594 Email: ee.shenzhen@sgs.com Report No.: SZEM180900837202 Page: 1 of 8

## **SAR Evaluation Report**

Test Result :	PASS*
Date of Issue:	2018-11-22
Date of Test:	2018-09-19 to 2018-11-21
Date of Receipt:	2018-09-18
	47 CFR Part 2.1093 KDB447498D01 General RF Exposure Guidance v06
Standards:	47 CFR Part 1.1307
FCC ID:	PZK-36044T
Trade Mark:	SUMMER
Model No.:	36044T
EUT Name:	BABY MONITOR
Equipment Under Test (EUT	):
Address of Factory:	NO.21, NANXING 3 <sup>RD</sup> ROAD, NANFANG IND PARK, BEIZHA, HUMEN, GONGGUAN, CHINA
Factory:	EXVISION INDUSTRIES LIMITED
Address of Manufacturer:	NO.21, NANXING 3 <sup>RD</sup> ROAD, NANFANG IND PARK, BEIZHA, HUMEN, GONGGUAN, CHINA
Manufacturer:	EXVISION INDUSTRIES LIMITED
Address of Applicant:	1275 Park East Drive, Woonsocket, Rhode Island 02895, United States.
Applicant:	Summer Infant, Inc.
Application No.:	- SZEM1809008372CR

In the configuration tested, the EUT complied with the standards specified above.



EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

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## 2 Version

Revision Record						
Version	sion Chapter Date		Modifier	Remark		
01		2018-11-22		Original		

Authorized for issue by:	
	Ceo. Ci
	Leo Li /Project Engineer
	Evic Fu
	Eric Fu /Reviewer

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### 4 General Information

### 4.1 General Description of EUT

Power supply:	DC 7.5V from adapter input AC 120V/60Hz Adapter Model: P6 0750500 Input: AC 100~240V 50/60Hz 250mA Output: DC 7.5V 500mA
Cable:	DC cable: 195cm unshielded
Operation Frequency:	2410-2477MHz
Modulation Type:	GFSK
Number of Channels:	20
Antenna Gain:	0dBi
Antenna Type:	PIFA Antenna

#### Channel lists:

Ch No.	Frequency	Ch No.	Frequency	Ch No.	Frequency
1	2410	10	2441.5	19	2473
2	2413.5	11	2445	20	2477
3	2417	12	2448.5		
4	2420.5	13	2452		
5	2424	14	2455.5		
6	2427.5	15	2459		
7	2431	16	2462.5		
8	2434.5	17	2466		
9	2438	18	2469.5		

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### 4.2 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

No. 1 Workshop, M-10, Middle section, Science & Technology Park, Shenzhen, Guangdong, China 518057

Telephone: +86 (0) 755 2601 2053 Fax: +86 (0) 755 2671 0594 No tests were sub-contracted.

### 4.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

#### CNAS (No. CNAS L2929)

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

#### A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

#### • VCCI

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

#### • FCC – Designation Number: CN1178

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

#### Innovation, Science and Economic Development Canada

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.



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### 4.4 Deviation from Standards

None.

## 4.5 Abnormalities from Standard Conditions

None.

### 4.6 Other Information Requested by the Customer

None.

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### 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)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	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 <sup>2</sup> )	6				
30–300	61.4	0.163	1.0	6				
300–1500	•••••	•••••	f/300	6				
1500–100,000			5	6				
(B) Limits	for General Populati	on/Uncontrolled Exp	oosure					
0.3–1.34	614	1.63	*(100)	30				
1.34–30	824/f	2.19/f	*(180/f <sup>2</sup> )	30				
30–300	27.5	0.073	0.2	30				
300–1500			f/1500	30				
1500-100,000			1.0	30				

#### F= Frequency in MHz

Friis Formula

Friis transmission formula:  $Pd = (Pout^*G)/(4^* Pi^* R 2)$ 

Where

Pd = power density in mW/cm2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

Pd id the limit of MPE, 1 mW/cm2. 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.

#### 5.1.2 Test Procedure

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

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#### 5.1.3 EUT RF Exposure Evaluation

Antenna Gain: 0dBi

Antenna Gain: The maximum Gain measured in fully anechoic chamber is 1.0 in linear scale. Output Power Into Antenna & RF Exposure Evaluation Distance:

Channel	Frequency (MHz)	Conduct power (including Tune- up tolerance) (dBm)	Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm <sup>2</sup> )	Limit (mW/cm²)	Result
Lowest	2410	11.84	15.276	0.003	1.0	PASS
Middle	2441.5	11.34	13.614	0.003	1.0	PASS
Highest	2477	10.93	12.388	0.002	1.0	PASS

Note: Refer to report No. SZEM180900837201 for EUT test Max Conducted Peak Output Power value. The distance r (4th column) calculated from the Fries transmission formula is far greater than 20 cm separation requirement.

- End of the Report -

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