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Report No.: SZEM160600515804  
Page: 1 of 7

## RF Exposure Evaluation Report

**Application No:** SZEM1606005158CR  
**Applicant:** JAB Distributors LLC DBAREM-Fit  
**Manufacturer:** Joint Chinese Ltd  
**Name:** Joint Chinese Ltd  
**Model No.(EUT):** Smart Pillow  
**Trade Mark:** ZEEQ by REM-Fit  
**IC :** 21823-RFZQ01  
**Standards:** RSS102 Issue 5 March 2015  
**Date of Receipt:** 2016-07-26  
**Date of Test:** 2016-07-29 to 2016-09-14  
**Date of Issue:** 2016-09-27

<b>Test Result:</b>	<b>PASS*</b>
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\* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Jack Zhang  
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.

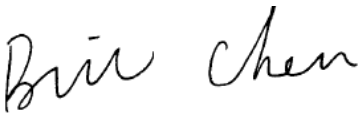
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## 2 Version

Revision Record				
Version	Chapter	Date	Modifier	Remark
00		2016-09-27		Original

Authorized for issue by:				
Tested By				2016-09-14
				Date
Checked By				2016-09-27
				Date
		(Bill Chen) /Project Engineer		
		(Eric Fu) /Reviewer		



### 3 Contents

1	COVER PAGE .....	1
2	VERSION .....	2
3	CONTENTS .....	3
4	GENERAL INFORMATION .....	4
4.1	CLIENT INFORMATION .....	4
4.2	GENERAL DESCRIPTION OF EUT .....	4
4.3	TEST LOCATION .....	5
4.4	TEST FACILITY .....	5
4.5	DEVIATION FROM STANDARDS .....	5
4.6	ABNORMALITIES FROM STANDARD CONDITIONS .....	5
4.7	OTHER INFORMATION REQUESTED BY THE CUSTOMER .....	5
5	RF EXPOSURE EVALUATION .....	6
5.1	RF EXPOSURE COMPLIANCE REQUIREMENT .....	6
5.1.1	Limits .....	6
5.1.2	Test Procedure .....	7
5.1.3	EUT RF Exposure Evaluation .....	7

## 4 General Information

### 4.1 Client Information

Applicant:	JAB Distributors LLC DBAREM-Fit
Address of Applicant:	1500 S. Wolf Road, Wheeling, IL USA
Manufacturer:	Joint Chinese Ltd
Address of Manufacturer:	Building 6, Huafeng Tech Park, Guangtian Road, Luotian Industrial Area, Songgang Town, Bao'an District, Shenzhen, P.R China 518125
Factory:	Joint Chinese Ltd
Address of Factory:	Building 6, Huafeng Tech Park, Guangtian Road, Luotian Industrial Area, Songgang Town, Bao'an District, Shenzhen, P.R China 518125

### 4.2 General Description of EUT

Product Name:	Smart Pillow
Model No.:	RFZQ01
Trade Mark:	ZEEQ by REM-Fit
Operation Frequency:	2402MHz~2480MHz
Antenna Type:	Integral
Antenna Gain:	0dBi
Power Supply	Rechargeable battery: DC 3.7V 5000mAh 18.5Wh (charge by USB)
For Classic Mode:	
Bluetooth Version:	V3.0 with EDR
Modulation Technique:	Frequency Hopping Spread Spectrum(FHSS)
Modulation Type:	GFSK, $\pi/4$ DQPSK, 8DPSK
Number of Channels:	79
Hopping Channel Type:	Adaptive Frequency Hopping systems
For BLE Mode	
Bluetooth Version:	V4.0 signal mode
Modulation Type:	GFSK
Number of Channel:	40

### 4.3 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.

### 4.4 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 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-823, R-4188, T-1153 and C-2383 respectively.

- **FCC – Registration No.: 556682**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 556682.

- **Industry Canada (IC)**

Two 3m Semi-anechoic chambers and the 10m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1, 4620C-2, 4620C-3.

### 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

All transmitters are exempt from routine SAR and RF exposure evaluations provided that they comply with the requirements of sections 2.5.1 or 2.5.2 of RSS102 issue 5 March 2015. If the equipment under test (EUT) meets the requirements of sections 2.5.1 or 2.5.2, applicants are only required to submit a properly signed declaration of compliance.

##### 5.1.1.1 Exemption Limits for Routine Evaluation — SAR Evaluation

SAR evaluation is required if the separation distance between the user and/or bystander and the antenna and/or radiating element of the device is less than or equal to 20 cm, except when the device operates at or below the applicable output power level (adjusted for tune-up tolerance) for the specified separation distance defined in Table 1.

Table 1: SAR evaluation — Exemption limits for routine evaluation based on frequency and separation distance

Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of ≤5 mm	At separation distance of 10 mm	At separation distance of 15 mm	At separation distance of 20 mm	At separation distance of 25 mm
≤300	71 mW	101 mW	132 mW	162 mW	193 mW
450	52 mW	70 mW	88 mW	106 mW	123 mW
835	17 mW	30 mW	42 mW	55 mW	67 mW
1900	7 mW	10 mW	18 mW	34 mW	60 mW
2450	4 mW	7 mW	15 mW	30 mW	52 mW
3500	2 mW	6 mW	16 mW	32 mW	55 mW
5800	1 mW	6 mW	15 mW	27 mW	41 mW

Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of 30 mm	At separation distance of 35 mm	At separation distance of 40 mm	At separation distance of 45 mm	At separation distance of ≥50 mm
≤300	223 mW	254 mW	284 mW	315 mW	345 mW
450	141 mW	159 mW	177 mW	195 mW	213 mW
835	80 mW	92 mW	105 mW	117 mW	130 mW
1900	99 mW	153 mW	225 mW	316 mW	431 mW
2450	83 mW	123 mW	173 mW	235 mW	309 mW
3500	86 mW	124 mW	170 mW	225 mW	290 mW
5800	56 mW	71 mW	85 mW	97 mW	106 mW

Output power level shall be the higher of the maximum conducted or equivalent isotropically radiated power (e.i.r.p.) source-based, time-averaged output power. For controlled use devices where the 8 W/kg for 1 gram of tissue applies, the exemption limits for routine evaluation in Table 1 are multiplied by a factor of 5. For limb-worn devices where the 10 gram value applies, the exemption limits for routine evaluation in Table 1 are multiplied by a factor of 2.5. If the operating frequency of the device is between two frequencies located in Table 1, linear interpolation shall be applied for the applicable separation distance. For test separation distance less than 5 mm, the exemption limits for a separation distance of 5 mm can be applied to determine if a routine evaluation is required.

For medical implants devices, the exemption limit for routine evaluation is set at 1 mW. The output power of a medical implants device is defined as the higher of the conducted or e.i.r.p to determine whether the device is exempt from the SAR evaluation.

### 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: 0dBi

Antenna Gain: The maximum Gain measured in fully anechoic chamber is 1 in linear scale.

#### For Classic Mode

Channel	Frequency (MHz)	Conduct power (dBm)	E.I.R.P. (mW)	Limit (mW)	Result
Lowest	2402	2.04	1.60	4.26	Pass
Middle	2441	3.57	2.28	4.05	Pass
Highest	2480	4.97	3.14	3.94	Pass

Note: Refer to report No. SZEM160600515802 for EUT test EIRP value.

#### For BLE Mode

Channel	Frequency (MHz)	Conduct power (dBm)	E.I.R.P. (mW)	Limit (mW)	Result
Lowest	2402	3.18	2.08	4.26	Pass
Middle	2440	3.60	2.29	4.05	Pass
Highest	2480	3.78	2.39	3.94	Pass

Note: Refer to report No. SZEM160600515803 for EUT test EIRP value.