

# RF Evaluation Report

**Product** : DIGITAL THERMOMETER  
**Trade mark** : N/A  
**Model/Type reference** : DMT-4735b  
**Serial Number** : N/A  
**Report Number** : EED32K00141902  
**FCC ID** : 2AQVU0001  
**Date of Issue** : Jul. 24, 2018  
**Test Standards** : 47 CFR Part 1.1307  
47 CFR Part 2.1093  
KDB 447498 D01 General  
RF Exposure Guidance v06  
**Test result** : PASS

Prepared for:

**JOYTECH HEALTHCARE CO., LTD.**  
**No.365, Wuzhou Road, Yuhang Economic Development Zone,**  
**Hangzhou city, 311100 Zhejiang, China**

Prepared by:

**Centre Testing International Group Co., Ltd.**  
**Hongwei Industrial Zone, Bao'an 70 District,**  
**Shenzhen, Guangdong, China**

**TEL: +86-755-3368 3668**

**FAX: +86-755-3368 3385**

Tested By:

*Tom chen*

Tom chen (Test Project)

Compiled by:

*Peter*

Peter (Project Engineer)

Reviewed by:

*Kevin Yang*

Kevin yang (Reviewer)

Approved by:

*Sheek Luo*

Sheek Luo (Lab supervisor)

Date:

Jul. 24, 2018

Check No.: 3177461265



## 2 Version

Version No.	Date	Description
00	Jul. 24, 2018	Original

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## 4 General Information

### 4.1 Client Information

Applicant:	JOYTECH HEALTHCARE CO., LTD.
Address of Applicant:	No.365, Wuzhou Road, Yuhang Economic Development Zone, Hangzhou city, 311100 Zhejiang, China
Manufacturer:	JOYTECH HEALTHCARE CO., LTD.
Address of Manufacturer:	No.365, Wuzhou Road, Yuhang Economic Development Zone, Hangzhou city, 311100 Zhejiang, China
Factory:	JOYTECH HEALTHCARE CO., LTD.
Address of Factory:	No.365, Wuzhou Road, Yuhang Economic Development Zone, Hangzhou city, 311100 Zhejiang, China

### 4.2 General Description of EUT

Product Name:	DIGITAL THERMOMETER
Model No.(EUT):	DMT-4735b
Trade mark:	N/A
EUT Supports Radios application:	BT4.0 Single Mode, 2402-2480MHz

### 4.3 Product Specification subjective to this standard

Frequency Range:	2402-2480MHz
Modulation Type:	GFSK
Number of Channels:	40
Sample Type:	Portable production
Antenna Type:	PCB Antenna
Antenna Gain:	0dBi
Power Supply:	Button battery (CR 2032) 3V
Conducted Peak Output Power:	3.855dBm The Power data refer to the report EED32K00141901
Sample Received Date:	Jun. 06, 2018
Sample tested Date:	Jun. 06, 2018 to Jul. 24, 2018
The tested sample(s) and the sample information are provided by the client.	

#### **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, Guangdong, China 518101

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 SAR Evaluation

### 5.1 RF Exposure Compliance Requirement

#### 5.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06  
Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

#### 5.1.2 Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$$\left[ \frac{\text{max. power of channel, including tune-up tolerance, mW}}{\text{min. test separation distance, mm}} \right] \cdot \sqrt{f(\text{GHz})} \leq 3.0$$
 for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, where  $f(\text{GHz})$  is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation<sup>17</sup>

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion

#### 5.1.3 EUT RF Exposure

The Max Conducted Peak Output Power is 3.855dBm in highest channel(2.402GHz);

The best case gain of the antenna is 0dBi.

$EIRP = 3.855\text{dBm} + 0\text{dBi} = 3.855\text{dBm}$

3.855dBm logarithmic terms convert to numeric result is nearly 2.43mW

According to the formula. calculate the EIRP test result:

$$\left[ \frac{\text{max. power of channel, including tune-up tolerance, mW}}{\text{min. test separation distance, mm}} \right] \cdot \sqrt{f(\text{GHz})}$$

General RF Exposure =  $(2.43\text{mW} / 5 \text{ mm}) \times \sqrt{2.402\text{GHz}} = 0.753$  ①

SAR requirement:

S= 3.0

② ;

① < ②.

So the SAR report is not required.

## PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32K00141901 for EUT external and internal photos.

\*\*\* End of Report \*\*\*

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