

# RF Exposure Evaluation Report

**Product** : DIGITAL THERMOMETER  
**Trade mark** : N/A  
**Model/Type reference** : DMT-4751, OT 30  
**Serial Number** : N/A  
**Report Number** : EED32K00303802  
**FCC ID** : 2AQVU0002  
**Date of Issue** : Dec. 06, 2018  
47 CFR Part 1.1307  
**Test Standards** : 47 CFR Part 2.1093  
KDB 447498D01v06  
**Test result** : PASS

Prepared for:

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**No. 365, Wuzhou Road, Yuhang Economic Development Zone,**  
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## 2 Version

Version No.	Date	Description
00	Dec. 06, 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-4751, OT 30
Test Model No.:	DMT-4751
Trade mark:	N/A
EUT Supports Radios application:	BT 4.0 Single mode, 2402-2480MHz

### 4.3 Product Specification subjective to this standard

Frequency Range:	2402-2480MHz
Sample Type:	Portable production
Test Power Grade:	N/A
Test Software of EUT:	N/A
Antenna Type :	PCB Antenna
Antenna Gain:	0dBi
Test Voltage:	Button battery (CR 2032) 3V
Power Supply:	Button battery (CR 2032) 3V
Test Power Grade:	N/A
Test Software of EUT:	N/A
Conducted Peak Output Power:	3.014dBm
	The Conducted Peak Output Power data refer to the report EED32K00303801
Firmware version of the sample:	V1.0(manufacturer declare)
Hardware version of the sample:	Z(manufacturer declare)
Sample Received Date:	Nov. 09, 2018
Sample tested Date:	Nov. 12, 2018 to Dec. 05, 2018
The tested sample(s) and the sample information are provided by the client. Model No.: DMT-4751, OT 30 Only the model DMT-4751 was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above models, only the model name is different.	

#### **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 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:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  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 3.014dBm in lowest channel(2.402GHz);

The best case gain of the antenna is 0dBi.

EIRP=3.014dBm + 0dBi = 3.014dBm

3.014dBm logarithmic terms convert to numeric result is nearly 2.002mW

According to the formula. calculate the EIRP test result:

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

General RF Exposure =  $(2.002\text{mW} / 5 \text{ mm}) \times \sqrt{2.402\text{GHz}} = 0.6206$  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. EED32K00303801 for EUT external and internal photos.

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

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