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
Test Standards	:	47 CFR Part 1.1307 47 CFR Part 2.1093 KDB 447498D01v06
Test result	:	PASS

Prepared for:

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

Prepared by:

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Reviewed by:	Kevin yang	Approved by:	Sheek Luo
Date:	Dec. 06, 2018		

Check No.:3570177792

2 Version

Version No.	Date	Description
00	Dec. 06, 2018	Original

3 Contents

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 ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation[17]

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 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:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)]

General RF Exposure = (2.002mW / 5 mm) x √2.402GHz = 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 ***