RF Exposure Evaluation Report

Product	:	Baby Health Monitor
Trade mark	:	N/A
Model/Type reference	:	R1-A1, R1-A2, R1-A3, R1-A4, R1-B1, R1-B2, R1-B3, R1-B4
Serial Number	:	N/A
Report Number	:	EED32L00174702
FCC ID	:	2ATZRR1Q1AB01
Date of Issue	:	Jul. 29, 2019
Test Standards	:	47 CFR Part 1.1307 47 CFR Part 2.1093 KDB447498D01 General RF Exposure Guidance v06
Test result	:	PASS

Prepared for:

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Prepared by:

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Approved by: — Date: Jul. 29, 2019

Check No.:3096335462

2 Version

Version No.	Date	Description
00	Jul. 29, 2019	Original

3 Contents

4 General Information

4.1 Client Information

Applicant:	QuantMed LifeTech (Shenzhen) Co., Ltd.
Address of Applicant:	1F, Huigu, Meisheng Chuanggu Science and Technology Park, No. 10 Longchang Road, Baoan District, Shenzhen
Manufacturer:	QuantMed LifeTech (Shenzhen) Co., Ltd.
Address of Manufacturer:	1F, Huigu, Meisheng Chuanggu Science and Technology Park, No. 10 Longchang Road, Baoan District, Shenzhen
Factory:	QuantMed LifeTech (Shenzhen) Co., Ltd.
Address of Factory:	1F, Huigu, Meisheng Chuanggu Science and Technology Park, No. 10 Longchang Road, Baoan District, Shenzhen

4.2 General Description of EUT

Product Name:	Baby Health Monitor
Model No.(EUT):	R1-A1, R1-A2, R1-A3, R1-A4, R1-B1, R1-B2, R1-B3, R1-B4
Test Model No.:	R1-A1
Trade Mark:	N/A
EUT Supports Radios application:	BT4.2 Single mode:2402-2480MHz;

4.3 Product Specification subjective to this standard

Frequency Range:	2402-2480MHz;
Modulation Type:	GFSK
Test Power Grade:	N/A(manufacturer declare)
Test Software of EUT:	nRFgo Studio(manufacturer declare)
Antenna Type:	Internal Antenna
Antenna Gain:	1.5dBi
Conduct Peak Power:	-4.15dBm
	The Max Conducted Peak output Power data refer to the report EED32L00174701
AC Adapter	Model:GQ06-050050-AU Input:100-240V Output:5.0V
Sample Received Date:	Jul. 02, 2019
Sample tested Date:	Jul. 02, 2019 to Jul. 25, 2019
The tested sample(s) and the sample information are provided by the client. Model No.: R1-A1, R1-A2, R1-A3, R1-A4, R1-B1, R1-B2, R1-B3, R1-B4 Only the model R1-A1 was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above models, with difference model name.	

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 4.31dBm in highest channel(2.480GHz);

The best case gain of the antenna is 1.5dBi.

EIRP= -4.15dBm + 1.5dBi = -2.65dBm

-2.65dBm logarithmic terms convert to numeric result is nearly 0.54mW

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 = (0.54mW / 5 mm) x √2.480GHz = 0.1699 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. EED32L00174701for EUT external and internal photos.

*** End of Report ***