RF Exposure Evaluation Report

Product	:	Fetal Monitor
Trade mark	:	JUMPER
Model/Type reference	:	JPD-300E
Serial Number	:	N/A
Report Number	:	EED32K00171707
FCC ID	:	2ADYL-JPD300ETX
Date of Issue	:	Jan. 10, 2019
Test Standards	:	47 CFR Part 1.1307 47 CFR Part 2.1093 KDB447498D01 General RF Exposure Guidance v06
Test result	:	PASS

Prepared for:

Shenzhen Jumper Medical Equipment Co., Ltd
D Building, No. 71, Xintian Road, Fuyong Street, Baoan, Shenzhen, Guangdong, China

Prepared by:

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Tested by:	Peter	Compiled by:	Tom chen
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Date:	Jan. 10, 2019		Check No.:3177469070

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2 Version

Version No.	Date	Description
00	Jan. 10, 2019	Original

3 Contents

4 General Information

4.1 Client Information

Applicant:	Shenzhen Jumper Medical Equipment Co., Ltd
Address of Applicant:	D Building, No. 71, Xintian Road, Fuyong Street, Baoan, Shenzhen, Guangdong, China
Manufacturer:	Shenzhen Jumper Medical Equipment Co., Ltd
Address of Manufacturer:	D Building, No. 71, Xintian Road, Fuyong Street, Baoan, Shenzhen, Guangdong, China
Factory:	Shenzhen Jumper Medical Equipment Co., Ltd
Address of Factory:	D Building, No. 71, Xintian Road, Fuyong Street, Baoan, Shenzhen, Guangdong, China

4.2 General Description of EUT

Product Name:	Fetal Monitor
Model No.(EUT):	JPD-300E
Trade Mark:	JUMPER
EUT Supports Radios application:	BT 4.1 Single mode, 2402MHz-2480MHz

4.3 Product Specification subjective to this standard

Frequency Range:	2402MHz-2480MHz
Sample Type:	Portable production
Test power grade:	N/A
Test software of EUT:	nRFgo Studio.exe(manufacturer declare)
Antenna Type:	PCB Antenna
Antenna Gain:	0dBi
Power Supply:	Battery: 3.7V 1000mAh
Conducted Peak Output Power:	-3.252dBm
	The Conducted Peak Output Power data refer to the report EED32K00171703
Firmware version:	M1_V1.0(manufacturer declare)
Hardware version:	V1.0(manufacturer declare)
Test power grade:	N/A
Test software of EUT:	nRFgo Studio.exe(manufacturer declare)
Test Voltage:	Battery: 3.7V 1000mAh
Sample Received Date:	Jul. 02, 2018
Sample tested Date:	Aug. 13, 2018 to Jan. 08, 2019
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, 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 -3.252dBm in Lowest channel(2.402GHz);

The best case gain of the antenna is 0dBi.

EIRP=-3.252dBm + 0dBi =-3.252dBm

-3.252dBm logarithmic terms convert to numeric result is nearly 0.473mW

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 = 0.473mW / 5 mm) x √2.402GHz = 0.1466 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. EED32K00171703 for EUT external and internal photos.

*** End of Report ***