RF Exposure Evaluation Report

Product	:	Finger Vein Identification Private Box
Trade mark	:	qin
Model/Type reference	:	PB-FV01
Serial Number	:	N/A
Report Number	:	EED32M00293402
FCC ID	:	2AXSTPBFV01US
Date of Issue	:	Oct. 26, 2020
Test Standards	:	47 CFR Part 1.1307 47 CFR Part 2.1091 KDB447498D01 General RF Exposure Guidance v06
Test result	:	PASS

Prepared for:

Shenzhen Duoqin Technology Co., Ltd.
2 floor, 9 building, Dezhi Hi-Tech,
Yang Tian Road, Baoan District, ShenZhen, China.

Prepared by:

Centre Testing International Group Co., Ltd.
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Date: Oct. 26, 2020

Check No.: 3096316755

2 Version

Version No.	Date	Description
00	Oct. 26, 2020	Original

3 Contents

4 General Information

4.1 Client Information

Applicant:	Shenzhen Duoqin Technology Co., Ltd.
Address of Applicant:	2 floor, 9 building, Dezhi Hi-Tech, Yang Tian Road, Baoan District, ShenZhen, China.
Manufacturer:	Shenzhen Duoqin Technology Co., Ltd.
Address of Manufacturer:	2 floor, 9 building, Dezhi Hi-Tech, Yang Tian Road, Baoan District, ShenZhen, China.
Factory:	Shenzhen H&h Intelligent Manufacturing Co., Ltd.
Address of Factory:	SZZT Industrial Park, NO.3 Tongguan Road, TianLiao Community, YuTang street, Guangming District, Shenzhen, China.

4.2 General Description of EUT

Product Name:	Finger Vein Identification Private Box
Model No.(EUT):	PB-FV01
Trade Mark:	qin
Frequency Range of Operation:	BT 4.0 single mode, 2400MHz to 2483.5MHz

4.3 Product Specification subjective to this standard

Operating Frequency:	2402MHz to 2480MHz	
Modulation Type:	GFSK	
Test Power Grade:	Default	
Test Software of EUT:	nRFgo Studio	
Antenna Type:	PIFA antenna	
Antenna Gain:	4.23 dBi	
Power Supply:	Battery:	LSP 18650 3.7V 4400mAh
Max Conducted Peak Output Power:	-3.291dBm	
	The Max Conducted Peak Output Power data refer to the report EED32M00293401	
Sample Received Date:	Sep. 16, 2020	
Sample tested Date:	Sep. 16, 2020 to Oct. 16, 2020	
Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.		

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 tune-up power is -3.5 dBm +/- 0.5dB, therefore the highest tune-up power is

-3.0 dBm	(0.50 mW)	@ 2441 MHz

When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

So,

(	0.50	/	5mm	) * (	2.441GHz	^0.5	)=	0.2	

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] * [√f(GHz)] = 0.2< 3.0

Therefore, standalone SAR measurements are not required for both head and body

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32M00293401 for EUT external and internal photos.

*** End of Report ***