RF Exposure Evaluation Report

Report No.:	RWAZ202300123F
Applicant:	Shenzhen Youmi Intelligent Technology Co., Ltd.
Address:	406-407 Jinqi Zhigu Building, 4/F, 1 Tangling Road, Nanshan District, Shenzhen City, China
Product Name:	Smart phone
Product Model:	PG3NBG7YA
Multiple Models:	N/A
Trade Mark:	UMIDIGI
FCC ID:	2ATZ4-G7
Standards:	47 CFR §1.1310 KDB 447498 D01 General RF Exposure Guidance v06
Test Date:	2024-02-23
Test Result:	Complied
Report Date:	2024-03-08

Reviewed by: Abel chen

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Project Engineer

Approved by Jacob Kong

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Prepared by:

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NVLAP TESTING NVLAP LAB CODE 600335-0

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Revision History

Version No.	Issued Date	Description
00	*2024-03-08*	*Original*

Contents

1 General Information

1.1 Client Information

Applicant:	Shenzhen Youmi Intelligent Technology Co., Ltd.
Address:	406-407 Jinqi Zhigu Building, 4/F, 1 Tangling Road, Nanshan District, Shenzhen City, China
Manufacturer:	Shenzhen Youmi Intelligent Technology Co., Ltd.
Address:	406-407 Jinqi Zhigu Building, 4/F, 1 Tangling Road, Nanshan District, Shenzhen City, China

1.2 Product Description of EUT

Sample Serial Number	36-2 for CE&RE test, 36-1 for RF test conducted test (assigned by WATC)
Sample Received Date	2023-12-15
Sample Status	Good Condition
Frequency Range	BLE: 2402MHz - 2480MHz NFC: 13.56MHz
Maximum Conducted Output Power	BLE: -4.06dBm
Maximum E-field Strength:	NFC: 71.13dBuV/m@3m
Modulation Technology	BLE: GFSK NFC: ASK
Antenna Gain#	BLE: 1.8dBi
Power Supply	DC 3.87V from battery or DC 5V from adapter
Operating temperature#	0 deg.C to +45 deg.C
Adapter 1 Information	Model: HF-0502000U Input: AC 100-240V~50/60Hz, 0.3A Output: DC 5.0V, 2.0A
Adapter 2 Information	Model: HJ-0502000W2-US Input: AC 100-240V~50/60Hz, 0.3A Output: DC 5.0V, 2.0A
Modification	Sample No Modification by the test lab

1.3 Laboratory Location

World Alliance Testing and Certification (Shenzhen) Co., Ltd

No. 1002, East Block, Laobing Building, Xingye Road 3012, Xixiang street, Bao'an District, Shenzhen, Guangdong, People's Republic of China

Tel: +86-755-29691511, Email: qa@watc.com.cn

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 463912, the FCC Designation No. : CN5040.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0160.

2 RF Exposure Evaluation

2.1 Standard

According to §1.1310, radio frequency devices shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB447498 D01 General RF Exposure Guidance v06:

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
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

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 according to 5) in section 4.1 is applied to determine SAR test exclusion.

c) For frequencies below 100 MHz, the following may be considered for SAR test exclusion:

1) For test separation distances > 50 mm and < 200 mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by [1 + log(100/f(MHz))]

2) For test separation distances ≤ 50 mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by ½

3) SAR measurement procedures are not established below 100 MHz

2.2 Result

Radio	Frequency (MHz)	Maximum Conducted Power including Tune-up Tolerance (dBm)	Min. test separation distance (mm)	Result (1-g SAR)	Exclusion Limit (1-g SAR)	Verdict
BLE	2402-2480	-4.0	5	0.1	3.0	Pass

Note: The Maximum Conducted Power including Tune-up Tolerance was declared by manufacturer.

Radio	Frequency (MHz)	Maximum E-Field Strength (dBuV/m@3m)	Maximum EIRP		Min. test separation distance (mm)	Exclusion Limit (mW)	Verdict
			(dBm)	(mW)			
NFC	13.56	71.13	-24.07	0.004	5	443	Pass

Note: EIRP[dBm] = E[dBμV/m] - 95.2 for d = 3 m.

SAR test exclusion threshold for NFC(13.56MHz) separation distance < 50mm

=[474*(1 + log(100/$f_{(MHz)}$))]/2

= 443mW

Result: Complied, No need standalone SAR test.

---End of Report---