RF EXPOSURE REPORT

For

Xinwei Electronic Co., Ltd., Quanzhou

Wan An Tang Xi Industrial Area, Luo Jiang, Quanzhou City, Fujian Province, China

FCC ID: UUPNF-781D

Report Type:	**Product Name:**
Original Report	Two Way Radio

Report Number:	2407S50596E-RF-04
Report Date:	2024-08-13
Reviewed By:	Stein Peng
Approved By:	Miles Chen
Prepared By:	Bay Area Compliance Laboratories Corp. (Xiamen) Unit 102, No. 902 Meifeng South Road, Binhai West Avenue, Science and Technology Innovation Park, Torch High tech Zone XiaMen Tel: +86-592-3200111 www.baclcorp.com.cn

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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	2407S50596E-RF-04	R1V1	2024-08-13	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product Name:		Two Way Radio
Tested Model:		NF-781D
Power Supply:		DC 3.7V from battery or DC 5V from chager
Maximum Output Power:		GFSK:-6.39dBm π/4-DQPSK:-5.67dBm 8DPSK:-5.04 dBm BLE:-1.16dBm
Adapter Information	Model:	XZ0500-2000UU
	Input:	AC 100-240V, 50/60Hz, 0.4A
	Output:	DC 5V, 2A
Charger	Model:	CHARGER FOR NF-781
	Input:	DC 5V, 2A
	Output:	DC 5V, 2A
Operating Band/Frequency:		2402-2480 MHz
Modulation Type:		BT:π/4-DQPSK, 8DPSK BLE:GFSK
Antenna Type:		Ceramic Antenna
★Maximum Antenna Gain:		2.5 dBi
EUT Received Status:		Good

Note:
1. The Maximum Antenna Gain was declared by manufacturer.
2. The model difference please refer to declaration letter.
2. All measurement and test data in this report was gathered from production sample serial number: 2407S50596E-RF-1.(Assigned by the BACL(Xiamen). The EUT supplied by the applicant was received on 2024-04-17)

Objective

This test report is prepared for *Xinwei Electronic Co., Ltd., Quanzhou* in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commissions rules.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Xiamen) to collect test data is located on the Unit 102, No. 902 Meifeng South Road, Binhai West Avenue, Science and Technology Innovation Park, Torch High tech Zone XiaMen.

Bay Area Compliance Laboratories Corp. (Xiamen) Lab is accredited to ISO/IEC 17025 by A2LA (Certificate Number: 7134.01) and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No. : CN1384.

RF EXPOSURE EVALUATION

Applicable Standard

According to§2.1093, systems operating under the provisions of this section 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.

Measurement Result

The max conducted power including tune-up tolerance is -1 dBm (0.79 mW).
[(max. power of channel, mW)/(min. test separation distance, mm)][√f(GHz)]
=0.79/5*(√2.480) = 0.25< 3.0

Result: Compliant. The stand-alone SAR evaluation is not necessary

EUT PHOTOGRAPHS

Please refer to the attachment 2407S50596E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2407S50596E-RF-INP EUT INTERNAL PHOTOGRAPHS.

Declarations

1. Bay Area Compliance Laboratories Corp. (Xiamen) is not responsible for authenticity of any information provided by the applicant. Information from the applicant that may affect test results are marked with an asterisk "★".

2. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested.

3. Unless required by the rule provided by the applicant or product regulations, then decision rule in this report did not consider the uncertainty.

4. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor k=2 with the 95.45% confidence interval.

5. This report cannot be reproduced except in full, without prior written approval of Bay Area Compliance Laboratories Corp. (Xiamen).

6. This report is valid only with a valid digital signature. The digital signature may be available only under the adobe software above version 7.0.

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