

TEST REPORT

Report Reference No...... : **MTEB24070313-H**

FCC ID..... : **NRH-LR-R107H**

Compiled by

(position+printed name+signature)..: File administrators Alisa Luo



Supervised by

(position+printed name+signature)..: Test Engineer Sunny Deng



Approved by

(position+printed name+signature)..: Manager Yvette Zhou



Date of issue..... : **July 22,2024**

Representative Laboratory Name.: **Shenzhen Most Technology Service Co., Ltd.**

Address..... : No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park,
Nanshan, Shenzhen, Guangdong, China.

Applicant's name..... : **Netvox Technology Co Ltd**

Address..... : No 21, Sec 1 Chung Hua West Road, Tainan, Taiwan

Test specification/ Standard..... : **47 CFR Part 1.1307**

47 CFR Part 2.1093

TRF Originator..... : Shenzhen Most Technology Service Co., Ltd.

Shenzhen Most Technology Service Co., Ltd. All rights reserved.

This publication may be reproduced in whole or in part for non-commercial purposes as long as the Shenzhen Most Technology Service Co., Ltd. is acknowledged as copyright owner and source of the material. Shenzhen Most Technology Service Co., Ltd. takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.

Test item description..... : Wireless Module

Trade Mark..... : **netvox**

Model/Type reference..... : R107H

Listed Models : N/A

Modulation Type..... : FSK

Operation Frequency..... : 902MHZ ~ 928MHz

Hardware version..... : V0.2

Software version : V1.0

Rating..... : DC 3V

Result..... : **PASS**

TEST REPORT

Equipment under Test : Wireless Module

Model /Type : R107H

Listed Models : N/A

Remark : N/A

Applicant : Netvox Technology Co Ltd

Address : No 21, Sec 1 Chung Hua West Road, Tainan, Taiwan

Manufacturer : Netvox Technology Co., Ltd. (Xiamen)

Address : No.2, Xin Feng 2 Road, Xiamen Torch Hi-Tech Industrial
Development Zone, Xiamen City, China

Test Result:	PASS
---------------------	-------------

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Contents

1. Revision History

Revision	Issue Date	Revisions	Revised By
/	2024-07-22	Initial Issue	Alisa Luo

Remark:On the basis of the original report “MTEB24070325-H” , the backup antenna, product circuit diagram, and wiring diagram have not been changed.All testing items have been retested.

2.1 RF Exposure Compliance Requirement

2.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. 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.

2.1.2 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:

$$\left[\frac{\text{max. power of channel, including tune-up tolerance, mW}}{(\text{min. test separation distance, mm})} \right] \cdot$$

$$[\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$

$f(\text{GHz})$ is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation¹⁷

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

2.1.3 EUT RF Exposure

$$\text{EIRP} = \text{PT} * \text{GT} = (\text{E} \times \text{D})^2 / 30$$

where:

PT = transmitter output power in watts,

GT = numeric gain of the transmitting antenna (unitless),

E = electric field strength in V/m, $10^{(\text{dB}\mu\text{V/m})/20} / 10^6$,

D = measurement distance in meters (m)---3m,

$$\text{So PT} = (\text{E} \times \text{D})^2 / 30 / \text{GT}$$

The worst case (refer to report **MTEB24070313-R**) is below:

For 927.5MHz wireless:

Field strength=96.38dBuV/m

Ant gain:-1.6dBi;so Ant numeric gain=0.69

$$\text{EIRP} = \text{PT} * \text{GT} = (\text{E} \times \text{D})^2 / 30 = (10^{(\text{dB}\mu\text{V/m})/20} / 10^6 * 3)^2 / 30 = 0.0013$$

$$\text{So PT} = \text{EIRP} / \text{GT} = 0.0019\text{W} = 1.9\text{mW}$$

$$\text{So } (1.9\text{mW}/5\text{mm}) * \sqrt{0.9023\text{GHz}} = 0.36$$

exclusion=0.36<3.0 for 1-g SAR

So the SAR report is not required.