

RF EVALUATION TEST REPORT

Applicant..... : Voxx Electronics Corporation

Address..... : 2365 Pontiac Road, Auburn Hills, Michigan 48326 - USA

Manufacturer..... : Nutek Corporation

Address..... : No. 167, Lane 235, Bauchiau Rd, Xindian District, New Taipei City 23145, Taiwan

Factory..... : Nutek Corporation

Address..... : No. 167, Lane 235, Bauchiau Rd, Xindian District, New Taipei City 23145, Taiwan

Product Name..... : BT Keypad

Brand Name..... : N/A

Model No. : 2403VD, 100-10332, 100-10335, NFC1

FCC ID..... : EZS2403VD

Measurement Standard..... : 47 CFR PART 2, Section 2.1091& 2.1093

Receipt Date of Samples.... : September 23, 2025

Date of Tested..... : September 24, 2025 to December 29, 2025

Date of Report..... : January 04, 2026

This report shows that above equipment is technically compliant with the requirements of the standards above. All test results in this report apply only to the tested sample(s). Without prior written approval of Dongguan Nore Testing Center Co., Ltd, this report shall not be reproduced except in full.



Prepared by

Jenny Liu / Project Engineer



Iori Fan / Authorized Signatory

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Revision History

Report Number	Description	Issued Date
NTC2509300F01	Initial Issue	2026-01-04

1. General Description of EUT

Product Information	
Product name:	BT/NFC Reader
Main Model Name:	2403VD
Additional Model Name:	100-10332, 100-10335, NFC1
Model Difference:	All the models are identical in electrical circuit design, PCB Layout, components and internal wiring, and the difference is model name only due to trading purpose.
S/N:	Not State
Brand Name:	N/A
Hardware version:	Not State
Software version:	Not State
Rating:	DC 12V
Classification:	Class B
Typical arrangement:	Tabletop
I/O Port:	Refer to the user's manual
Accessories Information	
Adapter:	N/A
Cable:	N/A
Other:	N/A
Additional Information	
Note:	According to the model differences, all tests were performed on 2403VD.
Remark:	All the information above are provided by the manufacturer. More detailed feature of the EUT please refers to the user manual.

Technical Specification (Bluetooth)	
Bluetooth Version:	V5.0
Frequency Range:	2402-2480MHz
Modulation Type:	GFSK
Number of Channel:	40 (refer to following channel list for details)
Channel Space:	2MHz
Antenna Type:	PCBA Antenna
Number of Antenna	1
Antenna Gain:	-5.82 dBi (Declared by the manufacturer)
RF PHY Support:	1Mbps, 2Mbps

Technical Specification (RFID)	
Declaring the Frequency:	13.56MHz
Modulation Type:	ASK
Antenna Type:	PCBA
Number of Channels:	1

2. Test Facility and Location

Test Site	:	Dongguan Nore Testing Center Co., Ltd. (Dongguan NTC Co., Ltd.)
Accreditations and Authorizations	:	The Laboratory has been assessed and proved to be in compliance with CNAS/CL01 Listed by CNAS, August 13, 2018 The Certificate Registration Number is L5795. The Certificate is valid until August 13, 2030 The Laboratory has been assessed and proved to be in compliance with ISO17025 Listed by A2LA, November 01, 2017 The Certificate Registration Number is 4429.01 The Certificate is valid until December 31, 2030 Listed by FCC, November 06, 2017 Test Firm Registration Number: 907417 Listed by Industry Canada, June 08, 2017 The Certificate Registration Number. Is 9743A
Test Site Location	:	Room 101, 1101, Building 2, No. 61, Hongmei Section, Wangsha Road, Hongmei Town, Dongguan, Guangdong, 523000 People's Republic of China

3. Applicable Standards and References

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

Test Standards:

47 CFR Part 1, 1.1307

47 CFR Part 2, 2.1091 & 2.1093

KDB447498 D01 V06

4. Maximum Permissible Exposure Limit

According to 47 CFR Part 1, 1.1307, for single RF sources (i.e., any single fixed RF source, mobile device, or portable device, as defined in paragraph (b)(2) of this section): A single RF source is exempt if: 47 CFR Part 1, 1.1307

(A) The available maximum time- averaged power is no more than 1 mW, regardless of separation distance. This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(ii)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(ii)(A);

(B) Or the available maximum time- averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where,

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

And,

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

d = the minimum separation distance (cm) in any direction from any part of the device antenna(s) or radiating structure(s) to the body of the device user.

For multiple RF sources: Multiple RF sources are exempt if:

(A) The available maximum time- averaged power of each source is no more than 1 mW and there is a separation distance of two centimeters between any portion of a radiating structure operating and the nearest portion of any other radiating structure in the same device, except if the sum of multiple sources is less than 1 mW during the time-averaging period, in which case they may be treated as a single source (separation is not required). This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(i)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(i)(A).

(B) in the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation.

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

Where,

a = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(B) of this section for P_{th} , including existing exempt transmitters and those being added.

b = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(C) of this section for Threshold ERP, including existing exempt transmitters and those being added.

c = number of existing fixed, mobile, or portable RF sources with known evaluation for the specified minimum distance including existing evaluated transmitters.

P_i = the available maximum time-averaged power or the ERP, whichever is greater, for fixed, mobile, or portable RF source i at a distance between 0.5 cm and 40 cm (inclusive).

$P_{th,i}$ = the exemption threshold power (P_{th}) according to paragraph (b)(3)(i)(B) of this section for fixed, mobile, or portable RF source i .

ERP_j = the ERP of fixed, mobile, or portable RF source j .

$ERP_{th,j}$ = exemption threshold ERP for fixed, mobile, or portable RF source j , at a distance of at least $\lambda/2\pi$ according to the applicable formula of paragraph (b)(3)(i)(C) of this section.

Evaluated_k= the maximum reported SAR or MPE of fixed, mobile, or portable RF source k either in the device or at the transmitter site from an existing evaluation at the location of exposure.

Exposure Limit_k= either the general population/uncontrolled maximum permissible exposure (MPE) or specific absorption rate (SAR) limit for each fixed, mobile, or portable RF source k, as applicable from §1.1310 of this chapter.

(C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

TABLE 1 TO § 1.1307(b)(3)(i)(C)—SINGLE RF SOURCES SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION	
RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	$1.920 R^2$
1.34-30	$3.450 R^2$
30-300	$3.83 R^2$
300-1500	$0.0128 R^2$
1500-1000000	$19.2 R^2$

5. RF Exposure Evaluation Results

Single RF Source								
Mode	Frequency (MHz)	Max. Conducted Power (dBm)	Antenna Gain (dBi)	Max. EIRP (dBm)	Max. ERP (dBm)	Max. ERP (mW)	Separation Distance (cm)	Part 1.1307 Option (B) P_{th} (mW)
Bluetooth	2402	-0.930	-5.82	-6.750	-8.9	0.13	20	3060

Single RF Source						
Mode	Frequency (MHz)	Max. Radiated Power E.I.R.P (dBm)	Max. ERP (dBm)	Max. ERP (mW)	Separation Distance (cm)	Part 1.1307 Option (C) P_{th} (mW)
RFID	13.56	-40.64	-42.79	0.00	20	0.75

Note: $EIRP = E + 20 \log d - 104.8$

Where d is the measurement distance=3m, $E = 54.62 \text{ dBu/m}$

Conclusion:

According to 47 CFR §1.1307 (b)(3)(i)(B) and (C), the RF exposure analysis concludes that the product is compliant with the FCC RF exposure requirements in mobile exposure condition.

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