



FCC – RF Exposure Report

Report Number : **60.790.24.080.01S01** Date of Issue: April 22, 2025

Model/HVIN : **Bluetooth Ratchet Lock,
Bluetooth Drawer Door Lock, Bluetooth Glass Door Lock**

Product Type : Slide Lock

Applicant : Mobile Technologies Inc.

Address : 2345 NE Overlook Drive, Hillsboro OR 97006 United States of America.

Production Facility (1) : Shenzhen Maxway Technology CO., LTD

Address : 3F, Building 4, Section A, 3rd Industrial Zone of Tangtou, Shiyan Town, Bao'an District, Shenzhen, China.

Production Facility (2) : Well Star Precision Technology Limited

Address : 24 Bao Ta Road, Bao Tang Community, Hou Jie Town, Dongguan City, Guangdong Province, China

Production Facility (3) : VIETNAM IBE LASER TECHNOLOGY COMPANY LIMITED

Address : lot CN-34 and Lot CN-39, Thuan Thanh II industrial zone, An Binh & Mao Dien commune, Thuan Thanh district, Bac Ninh province, Vietnam

Test Result : **Positive** Negative

Total pages including Appendices : 19

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2 Description of the Equipment Under Test

Description of the Equipment Under Test

| | |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Product: | Slide Lock |
| Model no.: | Bluetooth Ratchet Lock, Bluetooth Drawer Door Lock, Bluetooth Glass Door Lock |
| Hardware Version Identification No. (HVIN) | Bluetooth Ratchet Lock, Bluetooth Drawer Door Lock, Bluetooth Glass Door Lock |
| Product Marketing Name (PMN) | Slide Lock |
| Brand name: | N/A |
| FCC ID: | 2AA2X-15000118V2 |
| IC: | 24439-15000118V2 |
| Rating: | 3.0 VDC (CR123A Battery) |
| RF Transmission Frequency: | RFID: 125 kHz |
| Antenna Type: | RFID: Coil Antenna |
| Antenna Gain: | RFID: 0 dBi |
| Description of the EUT: | The Equipment Under Test (EUT) is a Slide Lock which support Bluetooth (BLE) function, Zigbee function and 125 kHz near field card access function. |

3 Summary of Test Standards

| Test Standards / Requirements | |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| ANSI Std C95.1-2019 | Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 kHz – 300 GHz. (IEEE Std C95.1-2019) |
| 47 CFR 1.1310 | Radiofrequency radiation exposure limits. |
| KDB 447498 D01 | General RF Exposure Guidance v06 |
| KDB 680106 D01 | Wireless Power Transfer v04 |

4 Details about the Test Laboratory

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
 Building 12&13 Zhiheng Wisdomland Business Park,
 Nantou Checkpoint Road 2,
 Shenzhen 518052, P.R.China
 FCC Registration Number: 514049

FCC Registration No.: 514049

FCC Designation

Number:

CN5009

Telephone:
 Fax:

86 755 8828 6998
 86 755 8828 5299

4.1 Test Equipment Site List

| DESCRIPTION | MANUFACTURER | MODEL NO. | SERIAL NO. | CAL. DUE DATE |
|--------------------------------------------|--------------|-----------|------------|---------------|
| Electric and magnetic field probe Analyzer | NARDA | EHP-200A | 180ZX10218 | 2025-2-20 |
| Test software | NARDA | EHP200-TS | 02.05 | N/A |
| Shielding Room #2 | TDK | BTC | ---- | 2025-10-15 |

4.2 Measurement System Uncertainty

Measurement System Uncertainty

| System Measurement Uncertainty | |
|----------------------------------------|----------------------------------------------|
| Items | Extended Uncertainty |
| Uncertainty Evaluation for RF Exposure | 1.45dB (Magnetic field) 1.45dB (Electric) |

Measurement Uncertainty Decision Rule

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115: 2023, clause 4.3.3 and 4.3.4.



5 General Remarks

Remarks

Applicant informs that the model **Bluetooth Glass Door Lock and Bluetooth Drawer Door Lock** have the same technical construction including circuit diagram and all electrical construction, with **Slide Lock, Bluetooth Ratchet Lock**.
The difference lies only in outlook / color, PCB Layout, components, component layout and mechanical construction of the different models.

SUMMARY:

- All tests according to the regulations cited on page 4 were
 - Performed
 - **Not** Performed
- The Equipment Under Test
 - **Fulfills** the general approval requirements.
 - **Does not** fulfill the general approval requirements.

Sample Received Date: October 10, 2024

Testing Start Date: October 10, 2024

Testing End Date: November 18, 2024

- TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch -

Reviewed by:

Prepared by:

Tested by:

Eric LI
Section Manager



Kevin DU
EMC Project Engineer

Carry CAI
EMC Test Engineer

6 Limit and Guidelines on Exposure to Electromagnetic Fields

According to §1.1310 system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

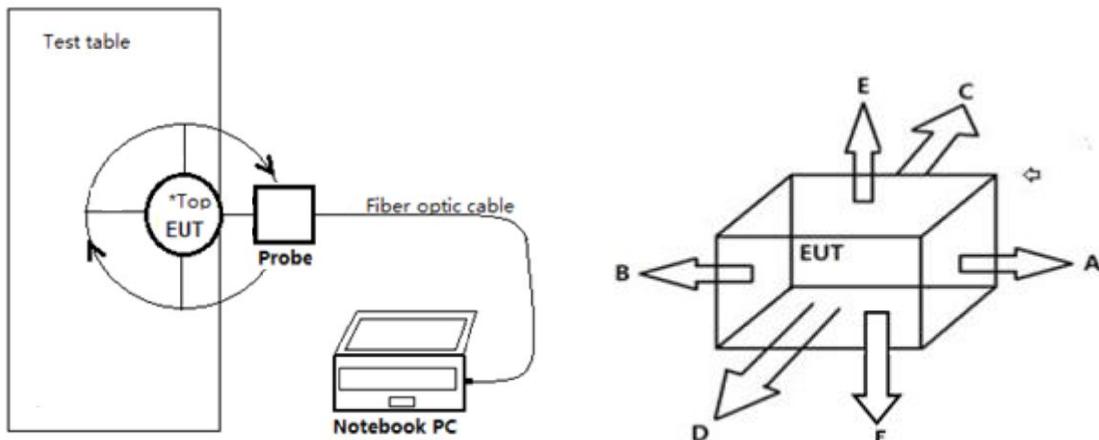
TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

| Frequency range (MHz) | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density (mW/cm ²) | Averaging time (minutes) |
|----------------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| (A) Limits for Occupational/Controlled Exposure | | | | |
| 0.3-3.0 | 614 | 1.63 | *100 | <6 |
| 3.0-30 | 1842/f | 4.89/f | *900/f ² | <6 |
| 30-300 | 61.4 | 0.163 | 1.0 | <6 |
| 300-1,500 | | | f/300 | <6 |
| 1,500-100,000 | | | 5 | <6 |
| (B) Limits for General Population/Uncontrolled Exposure | | | | |
| 0.3-1.34 | 614 | 1.63 | *100 | <30 |
| 1.34-30 | 824/f | 2.19/f | *180/f ² | <30 |
| 30-300 | 27.5 | 0.073 | 0.2 | <30 |
| 300-1,500 | | | f/1500 | <30 |
| 1,500-100,000 | | | 1.0 | <30 |

f = frequency in MHz * = Plane-wave equivalent power density

Per the guidance of KDB 680106, the E-field and H-field limits between 100 kHz to 300 kHz are to be considered the same as those at 300 kHz in Table 1 of § 1.1310 shown in the table above, any device (both portable and mobile) operating at frequencies below 100 kHz is considered compliant for the purpose of equipment authorization when the external (unperturbed) temporal peak field strengths do not exceed the 83 V/m for the electric field strength (E) and 90 A/m for the magnetic field strength (H).

7 Test Setup



The test distance between the edge of the EUT and the probe center is 20cm

8 Measurement Procedure

- The RF exposure test was performed on the table in anechoic chamber.
- The measurement was investigated between the edge of the EUT and center of the field
- probe in the closest state.
- Maximum E-field and H-field measurements were made on each of six sides of the EUT that could come in contact with a user. Six sides are defined as follows: Front (A), Rear (B), Left (C), Right (D), Top (E), Bottom (F) and Bottom and Refer to the test position diagram above.
- According to the guidance of KDB 680106 D01 v04, test distance 20cm was the distance between the edge of the EUT and the probe center.

9 Test Result

Bluetooth Ratchet Lock

Operating Mode

| Electric Field Emissions | | | | |
|--------------------------|--------------------|---------------------|-------------|--------|
| Test Position | Test Distance (cm) | Measure Value (V/m) | Limit (V/m) | Result |
| Front | 20 | 1.0595 | 614 | PASS |
| Rear | 20 | 0.3539 | 614 | PASS |
| Left | 20 | 0.3959 | 614 | PASS |
| Right | 20 | 0.4276 | 614 | PASS |
| Top | 20 | 0.3546 | 614 | PASS |
| Bottom | 20 | 0.3546 | 614 | PASS |
| Magnetic Field Emissions | | | | |
| Test Position | Test Distance (cm) | Measure Value (A/m) | Limit (A/m) | Result |
| Front | 20 | 0.0163 | 1.63 | PASS |
| Rear | 20 | 0.0163 | 1.63 | PASS |
| Left | 20 | 0.0160 | 1.63 | PASS |
| Right | 20 | 0.0164 | 1.63 | PASS |
| Top | 20 | 0.0158 | 1.63 | PASS |
| Bottom | 20 | 0.0162 | 1.63 | PASS |

Bluetooth Glass Door Lock

Operating Mode

| Electric Field Emissions | | | | |
|--------------------------|--------------------|---------------------|-------------|--------|
| Test Position | Test Distance (cm) | Measure Value (V/m) | Limit (V/m) | Result |
| Front | 20 | 0.6459 | 614 | PASS |
| Rear | 20 | 0.3624 | 614 | PASS |
| Left | 20 | 0.3539 | 614 | PASS |
| Right | 20 | 0.3566 | 614 | PASS |
| Top | 20 | 0.3766 | 614 | PASS |
| Bottom | 20 | 0.3546 | 614 | PASS |
| Magnetic Field Emissions | | | | |
| Test Position | Test Distance (cm) | Measure Value (A/m) | Limit (A/m) | Result |
| Front | 20 | 0.0168 | 1.63 | PASS |
| Rear | 20 | 0.0168 | 1.63 | PASS |
| Left | 20 | 0.0163 | 1.63 | PASS |
| Right | 20 | 0.0168 | 1.63 | PASS |
| Top | 20 | 0.0163 | 1.63 | PASS |
| Bottom | 20 | 0.0164 | 1.63 | PASS |

Test Result

Bluetooth Drawer Door Lock

Operating Mode

| Electric Field Emissions | | | | |
|--------------------------|--------------------|---------------------|-------------|--------|
| Test Position | Test Distance (cm) | Measure Value (V/m) | Limit (V/m) | Result |
| Front | 20 | 0.6638 | 614 | PASS |
| Rear | 20 | 0.3546 | 614 | PASS |
| Left | 20 | 0.3624 | 614 | PASS |
| Right | 20 | 0.3459 | 614 | PASS |
| Top | 20 | 0.3546 | 614 | PASS |
| Bottom | 20 | 0.3766 | 614 | PASS |
| Magnetic Field Emissions | | | | |
| Test Position | Test Distance (cm) | Measure Value (A/m) | Limit (A/m) | Result |
| Front | 20 | 0.0347 | 1.63 | PASS |
| Rear | 20 | 0.0158 | 1.63 | PASS |
| Left | 20 | 0.0168 | 1.63 | PASS |
| Right | 20 | 0.0274 | 1.63 | PASS |
| Top | 20 | 0.0162 | 1.63 | PASS |
| Bottom | 20 | 0.0157 | 1.63 | PASS |

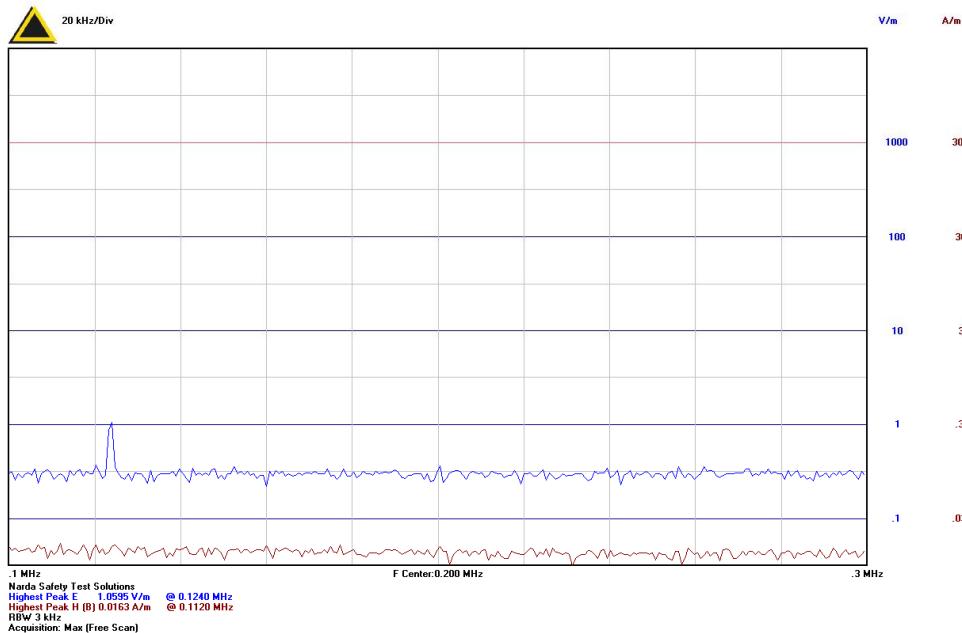
- The test result compliance with requirement



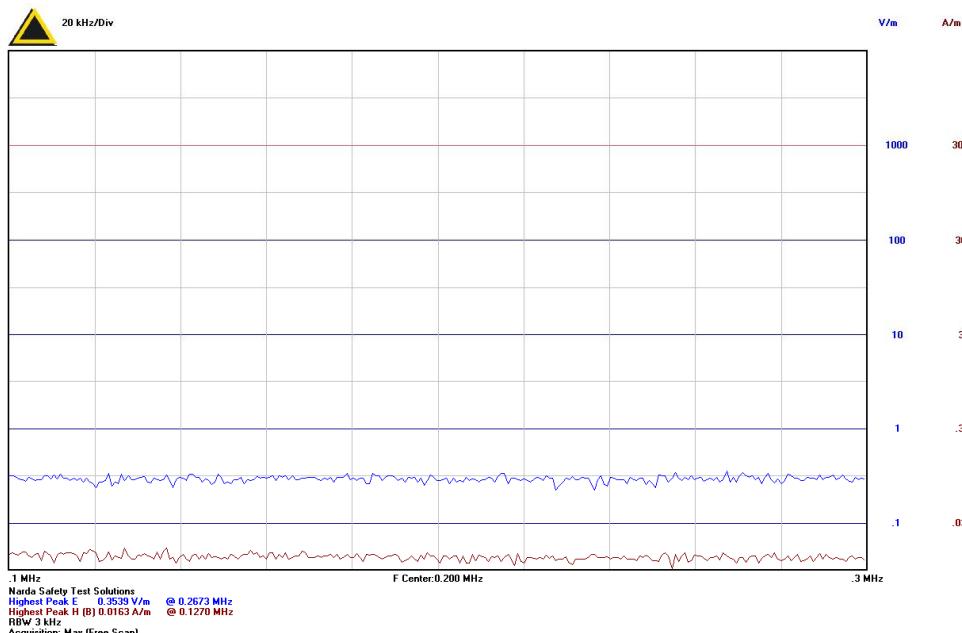
Test Result

Bluetooth Ratchet Lock

Front



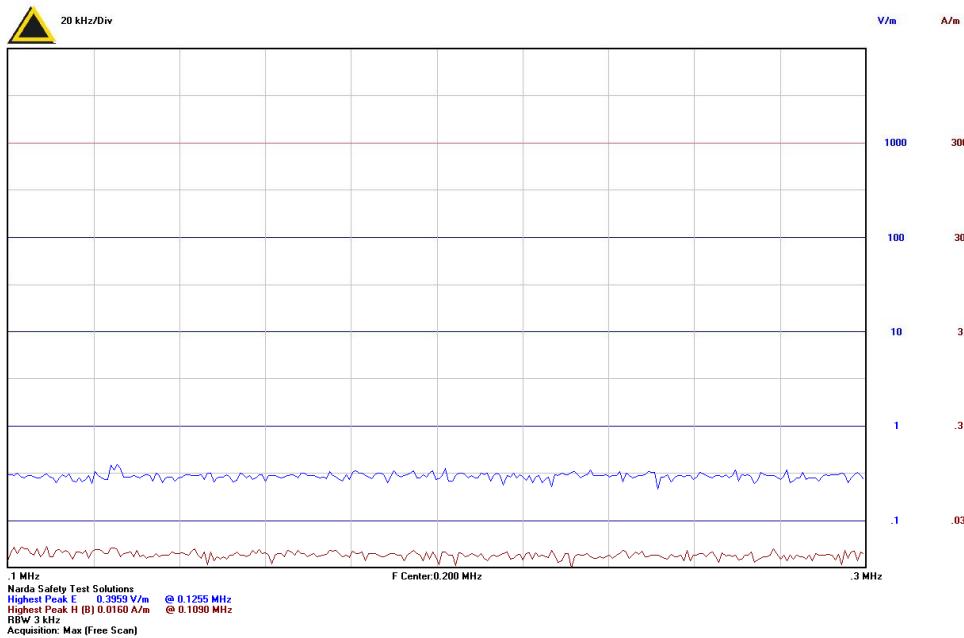
Rear



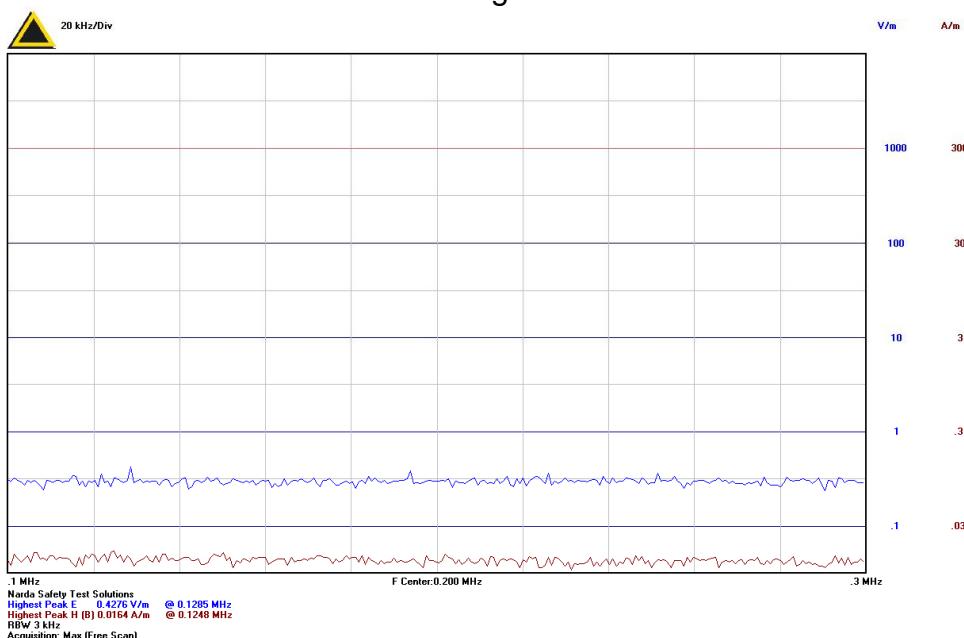
Test Result

Bluetooth Ratchet Lock

Left



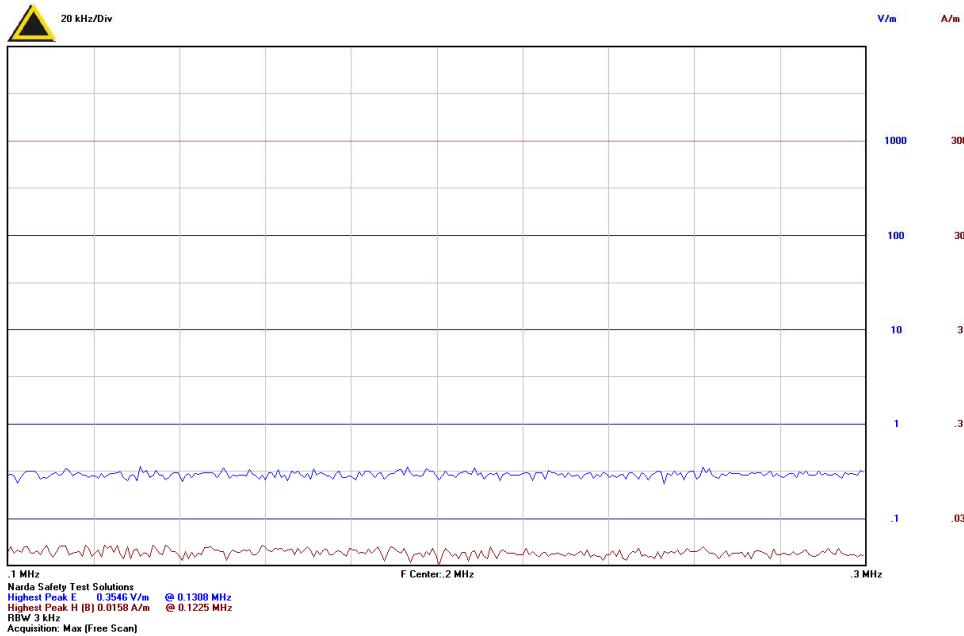
Right



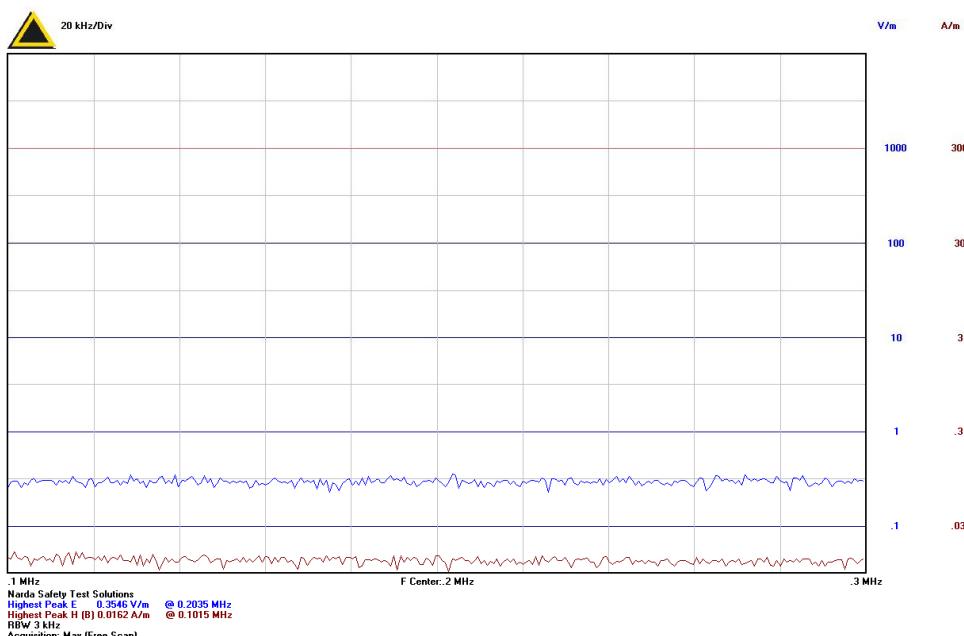
Test Result

Bluetooth Ratchet Lock

Top



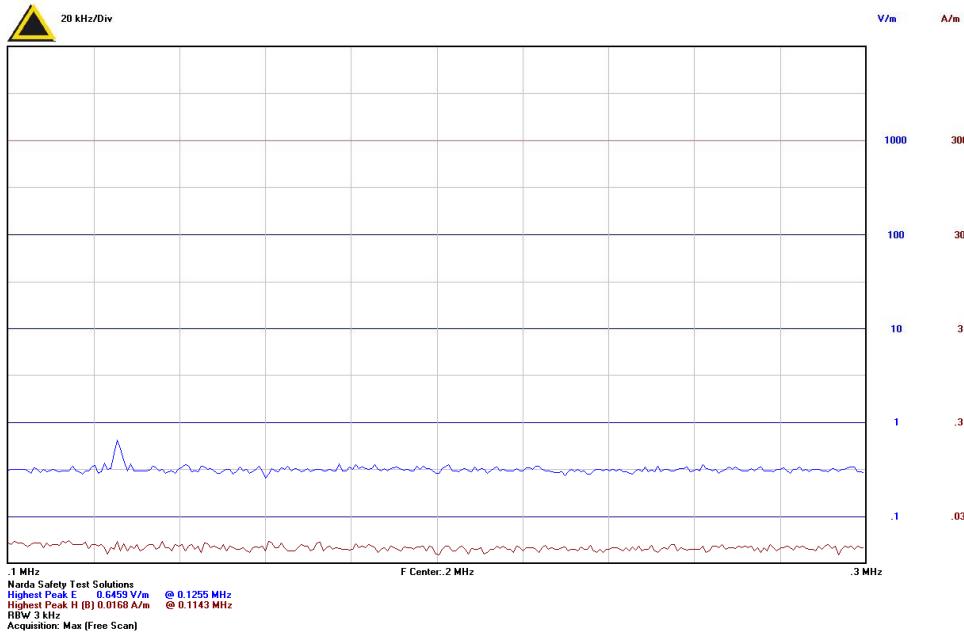
Bottom



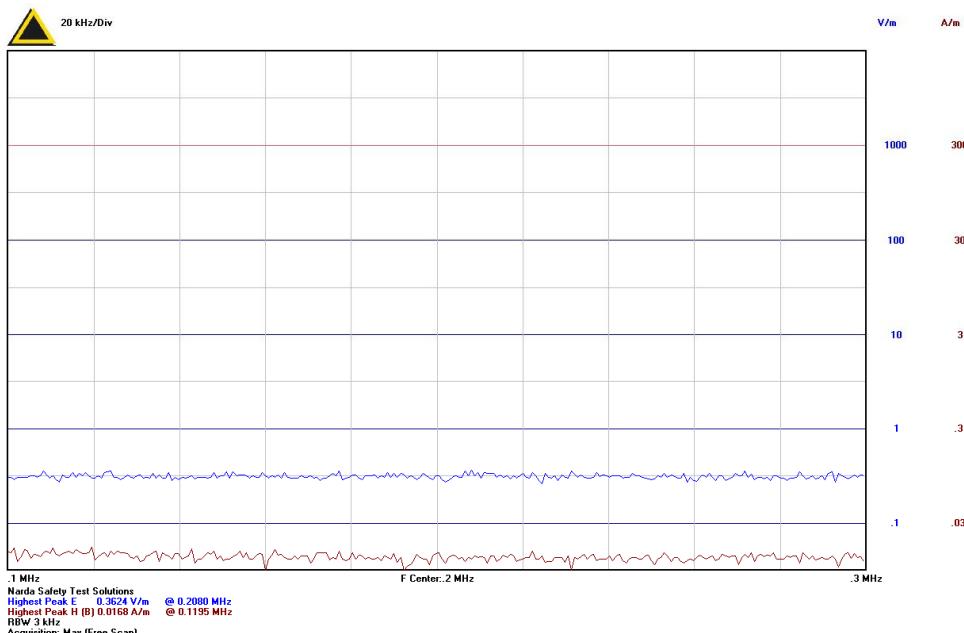
Test Result

Bluetooth Glass Door Lock

Front



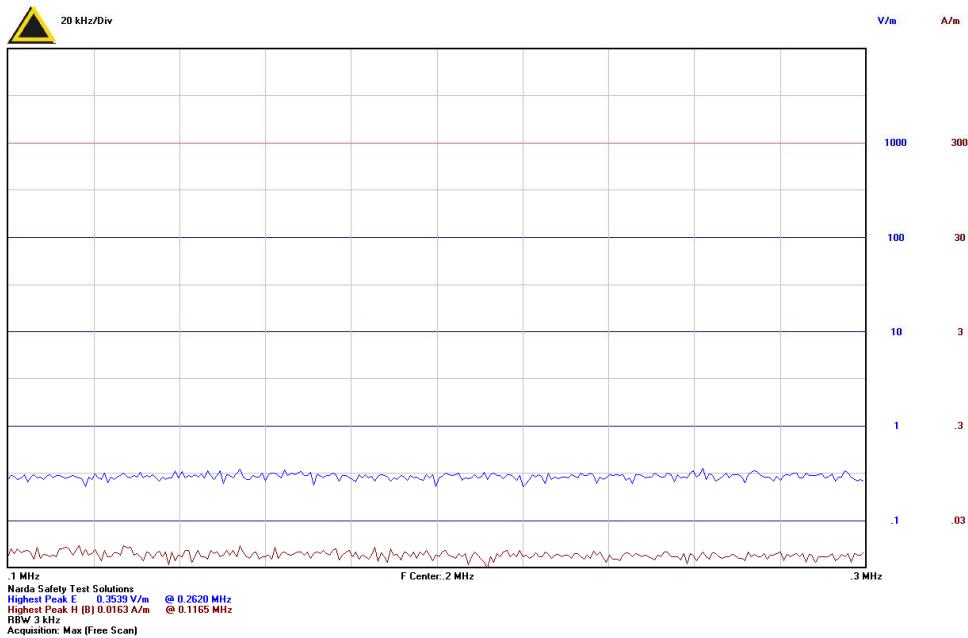
Rear



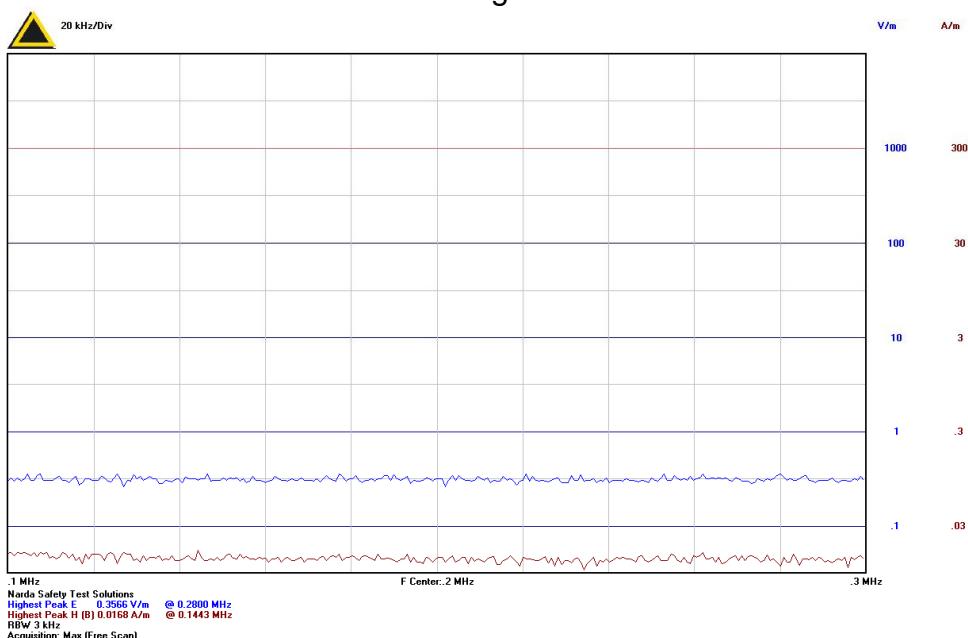
Test Result

Bluetooth Glass Door Lock

Left



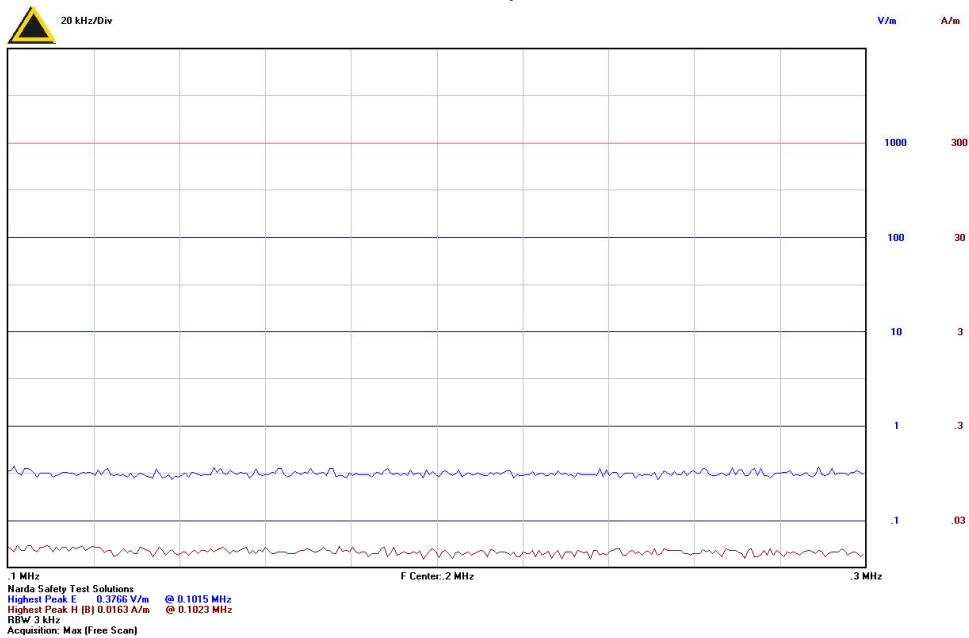
Right



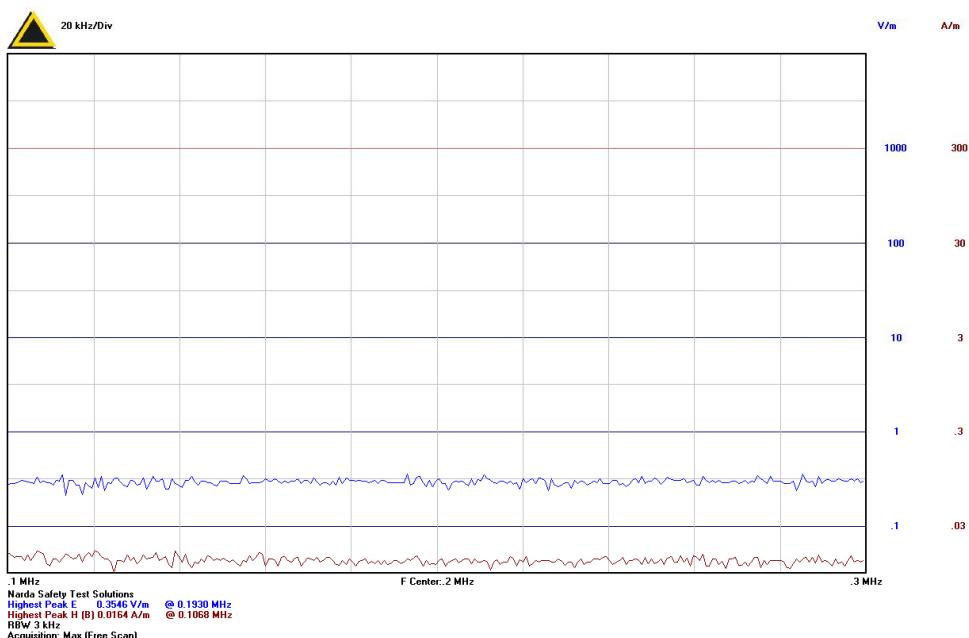
Test Result

Bluetooth Glass Door Lock

Top



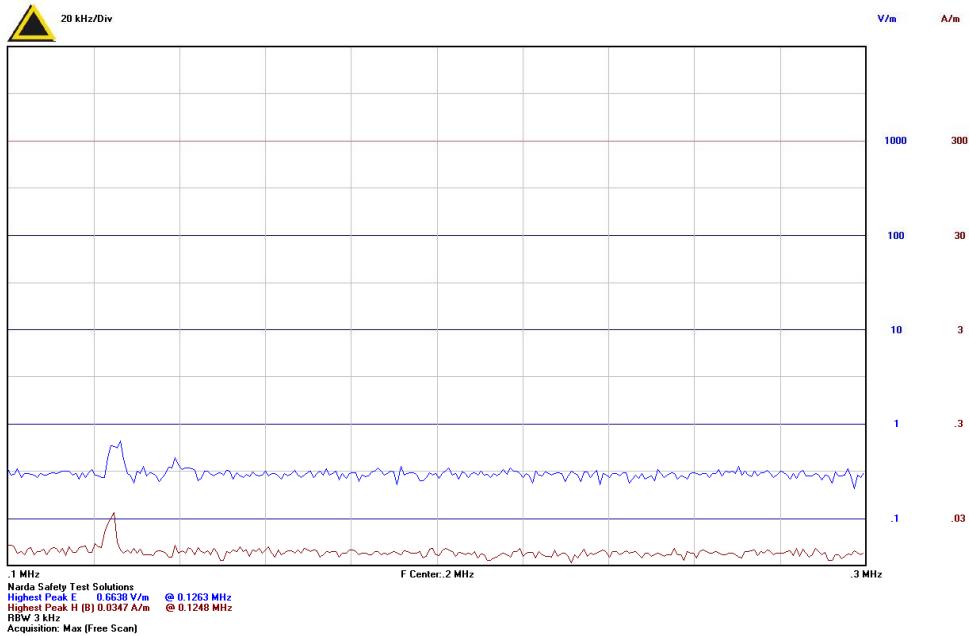
Bottom



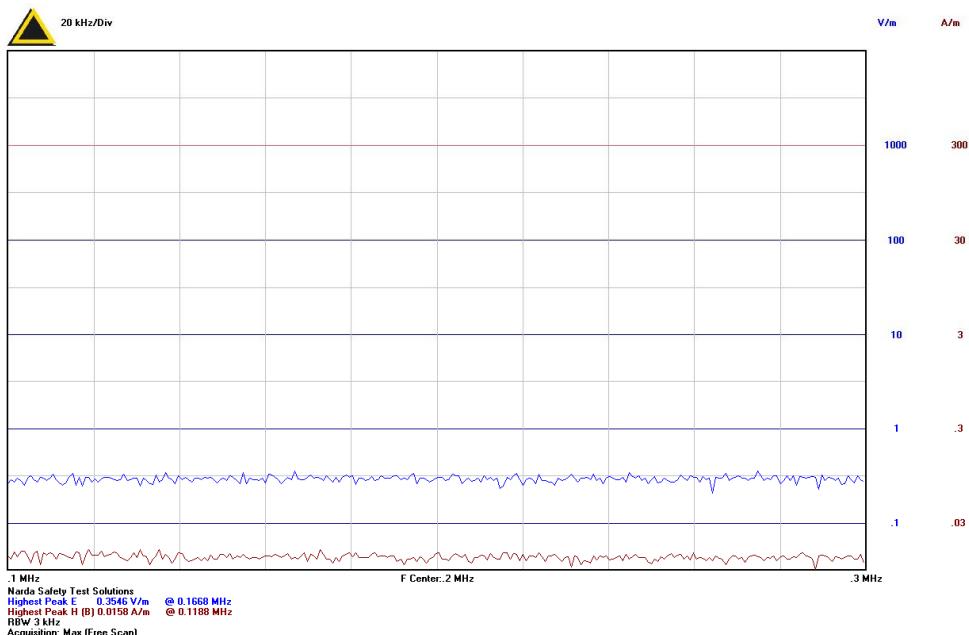
Test Result

Bluetooth Drawer Door Lock

Front



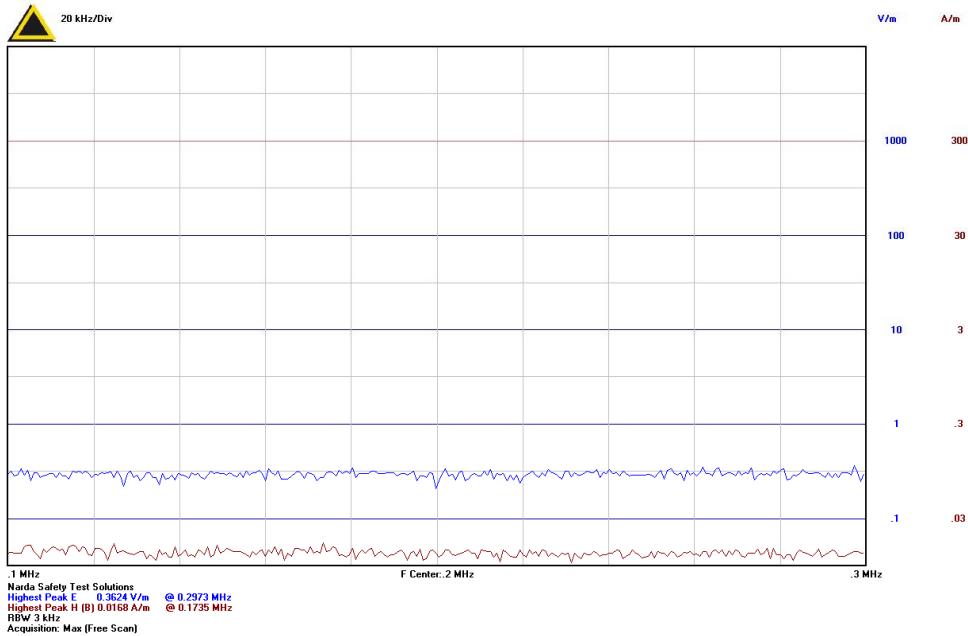
Rear



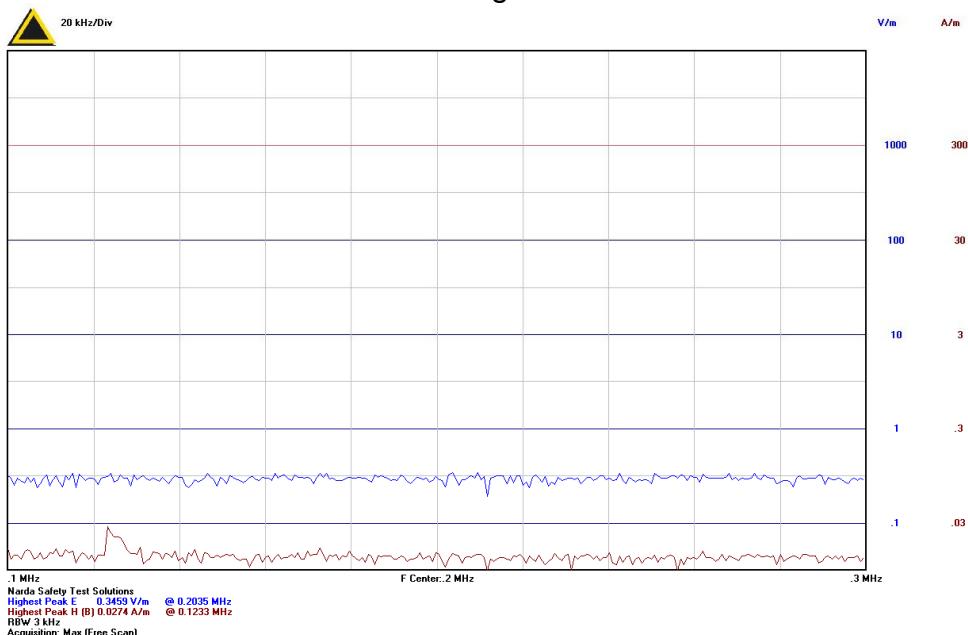
Test Result

Bluetooth Drawer Door Lock

Left



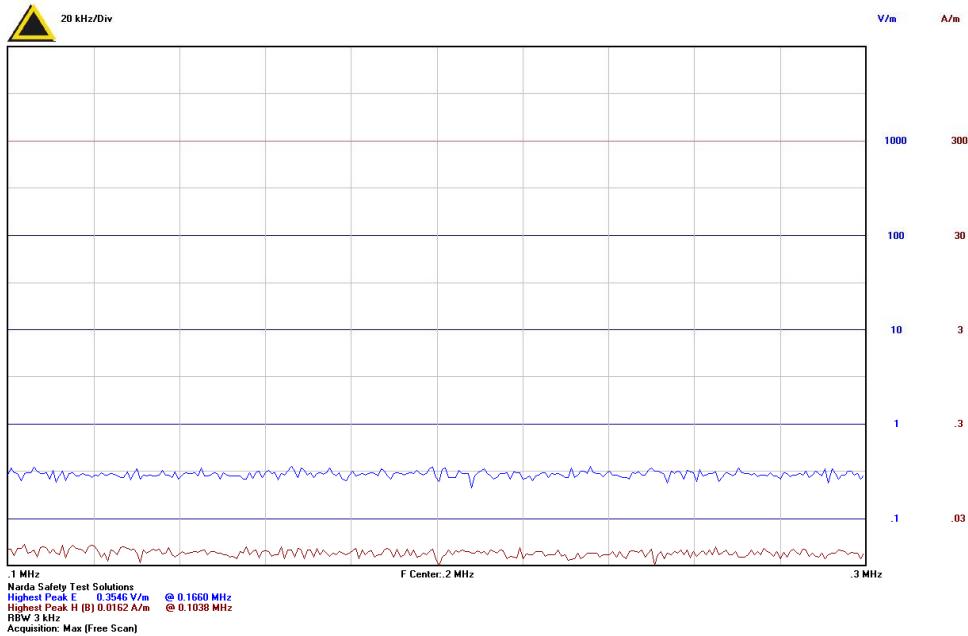
Right



Test Result

Bluetooth Drawer Door Lock

Top



Bottom

