

Health Test Report

Report No.: AGC16823250801EH01

PRODUCT DESIGNATION: Ruuvi Air

BRAND NAME: Ruuvi

MODEL NAME: Ruuvi Air

APPLICANT : Ruuvi Innovations Ltd.

DATE OF ISSUE : Sep. 08, 2025

STANDARD(S) : EN IEC 62311:2020 EN 50665:2017

REPORT VERSION: V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd



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Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Sep. 08, 2025	Valid	Initial Release



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1. General Information

Applicant	Ruuvi Innovations Ltd.
Address	Hameenkatu 10 B 132, RIIHIMAKI 11100, Finland
Manufacturer	Ruuvi Innovations Ltd.
Address	Hameenkatu 10 B 132, RIIHIMAKI 11100, Finland
Factory	Ruuvi Innovations Ltd.
Address	Hameenkatu 10 B 132, RIIHIMAKI 11100, Finland
Product Designation	Ruuvi Air
Brand Name	Ruuvi
Test Model	Ruuvi Air
Series Model(s)	N/A
Difference Description	N/A
Date of receipt of test item	Aug. 15, 2025
Date of Test	Aug. 15, 2025 to Sep. 05, 2025
Deviation from Standard	No any deviation from the test method
Condition of Test Sample	Normal
Test Result	Pass
Test Report Form No	AGCER-EU-Health/4-V1

Note: The test results of this report relate only to the tested sample identified in this report.

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	Thea Huang (Project Engineer)	Sep. 08, 2025
Reviewed By	Bibo zhang	
	Bibo Zhang (Reviewer)	Sep. 08, 2025
Approved By	Angole Li	
	Angela Li (Authorized Officer)	Sep. 08, 2025



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2. Product Information

2.1 Product Technical Description

Product Designation	Ruuvi Air			
Test Model	Ruuvi Air			
Hardware Version	V1.0			
Software Version	V1.0			
Power Supply	DC 5V			
	Bluetooth Low Energy Technical Parameters			
Operating Frequency	2402MHz-2480MHz			
Modulation Type	⊠ LE_GFSK_125kbps ⊠ LE_GFSK_1Mbps ⊠ LE_GFSK_2Mbps			
Number of channels	40 Channels			
Antenna Designation	PCB Antenna			
Antenna Gain	2.41dBi			
Short Range Radio Technical Parameters				
Permitted Range of Operating Frequency	13.06-14.06MHz			
Operation Frequency	13.56MHz			
Modulation Type	ASK			
Antenna Designation	Coil Antenna			
Antenna Gain	0dBi			

Note:

- 1. The above information was declared by the manufacturer.
- 2. The equipment submitted are representative production models.
- 3. For more details, please refer to the User's manual of the EUT.



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3. Test Environment

3.1 Address of The Test Laboratory

Laboratory: Attestation of Global Compliance (Shenzhen) Co., Ltd.

Address: 1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

3.2 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L5488

Attestation of Global Compliance (Shenzhen) Co., Ltd. has been assessed and proved to follow CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories.)

A2LA-Lab Cert. No.: 5054.02

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to follow ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 975832

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files with Registration 975832.

IC-Registration No.: 24842(CAB identifier: CN0063)

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the Certification and Engineering Bureau of Industry Canada. The acceptance letter from the IC is maintained in our files with Registration 24842.



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4. EN 62311 Requirements for Far Field Calculation Measurements

4.1 Evaluation Methodology

- This International Standard applies to electronic and electrical equipment for which no dedicated productor product family standard regarding human exposure to electromagnetic fields applies.
- This generic standard applies to electronic and electrical apparatus for which no dedicated product- or product family standard regarding human exposure to electromagnetic fields applies.
- The frequency range covered is 0 Hz to 300 GHz.
- The object of this generic standard is to provide assessment methods and criteria to evaluate such equipment against basic restrictions or reference levels on exposure of the general public related to electric, magnetic, electromagnetic fields and induced and contact current.

Note: This standard is intended to cover both intentional and non-intentional radiators. If the equipment complies with the requirements in another relevant standard, e.g. EN 62479 covering low power equipment, then the requirements of this standard (IEC 62311) are considered to be met and the application of this standard to that equipment is not necessary.

4.2 Measurement limits

According to EN IEC 62311:2020, Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0Hz–300GHz).

Frequency Range	E-field Strength (V/m)	H-Field Strength (A/m)	B-Field (uT)	Equivalent plane Wave Power Density (W/m²)
0-1 Hz		3.2*10 ⁴	4*10 ⁴	
1-8 Hz	10000	3.2*10 ⁴ /f ²	4*10 ⁴ /f ²	
8-25 Hz	10000	4000/f	5000/f	
0.025-0.8 kHz	250/f	4/f	5/f	
0.8-3 kHz	250/f	5	6.25	
3-150 kHz	87	5	6.25	
0.15-1 MHz	87	0.73/f	0.92/f	
1-10 MHz	87/f ^{1/2}	0.73/f	0.92/f	
10-400 MHz	28	0.073	0.092	2
400-2000 MHz	1.375 f ^{1/2}	0.0037 f ^{1/2}	0.0046 f ^{1/2}	f/200
2-300 GHz	61	0.16	0.20	10

*Note:

- f as indicated in the frequency range column.
- Provided that basic restrictions are met and adverse indirect effects can be excluded, field strength values can be exceeded.
- 3. For frequencies between 100 kHz and 10 GHz, S, E2 , H2 and B2 are to be averaged over any 6-min period.
- 4. For peak values at frequencies up to 100 kHz see Table 4, note 3.



- 5. For peak values at frequencies exceeding 100 kHz see Figs.1 and 2. Between 100 kHz and 10MHz, peak values for the field strengths are obtained by interpolation from the 1.5-fold peak at 100 kHz to the 32-fold peak at 10 MHz. For frequencies exceeding 10 MHz it is suggested that the peak equivalent plane wave power density, as averaged over the pulse width, does not exceed 1,000 times the S restrictions, or that the field strength does not exceed 32 times the field strength exposure levels given in the table.
- 6. For frequencies exceeding 10 GHz, S, E2, H2 and B2 are to be averaged over any 68/ f1.05 –min period (f in GHz).
- 7. No E-field value is provided for frequencies < 1 Hz, which are effectively static electric fields, Electric shock from low impedance sources is prevented by established electrical safety procedures for such equipment

4.3 Classification of the Assessment Methods

According to User manual, the antenna of the product is at least 20cm away from the body of the user. Warning statement to the user for keeping at least 20cm separation distance and the prohibition of operating to a person has been printed on the user's manual. So, this product under normal use is located on electromagnetic far field between the human body.

Far Field Calculation Formula

 $E = \eta_0 H = \frac{\sqrt{30PG(\theta, \phi)}}{r}$

where

G is the antenna gain relative to an isotropic antenna;

 θ, ϕ are elevation and azimuth angles to point of investigation;

is the distance from observation point to the antenna;

 η_0 is the characteristic impedance of free space.

• The Pointing vector gives the power density:

$$S = E \times H = \frac{E^2}{\eta} = \frac{P}{4\pi r^2}$$

• For the Simultaneous transmission may use below similar formular:

$$\sum_{i} \frac{S_{i}}{S_{Limit,i}} \le 1$$

4.4 Description of Test Modes

Set the EUT to transmit at lowest, middle and highest channel individually at maximum power.

Note: only worst case recorded in the test report.



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4.5 Test Result

Operating Mode	Frequency (MHz)	Max Tune up Power (dBm)	Antenna Gain (Linera) (dBi)	Max Tune up Power (W)	E-Field Strength (V/m)	E-Field Limit (V/m)	Result
BLE-2Mbps	2480	-0.11	1.74	0.00097499	1.128	61.00	Pass
LE125K	2480	-2.57	1.74	0.00055335	0.644	61.00	Pass

Note: The maximum output power refers to the project report number: AGC16823250801ER02.

4.6 Evaluation Conclusion

Remark: EUT meets the basic requirements in the standard.



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Conditions of Issuance of Test Reports

- 1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Co., Ltd (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the "Clients").
- 2. Any report issued by Company as a result of this application for testing services (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders. 3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of
- 3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
- 4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
- 5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
- 6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
- 7. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
- 8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.
- 9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.

----End of Report----