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FCC RF Exposure Test Report



Certificate #6613.01

FCC SAR Exemption Evaluation Report

Report No. : PSU-NQN2506130117SA01

Applicant : VBI Group, Inc., d/b/a ikon Technologies

Address : 1161 Corporate Dr W, Ste 200 Arlington, TX 76006 United States

Product : Keyfob

FCC ID : 2AWPW-IKN-KF

Brand : ikon

Model No. : E20KF

Standards : FCC 47 CFR Part 2 (2.1093)
KDB 447498 D01 v06

Date of Testing : Jun. 16, 2025 - Jul. 18, 2025

Test Lab : The FCC Site Registration No. is 434559; The Designation No. is CN1325.

Issued By : Huarui 7layers High Technology (Suzhou) Co., Ltd.

Address : Tower N, Innovation Center, 88 Zuyi Road, High-tech District, Suzhou City,
Anhui Province China

CERTIFICATION: The above equipment have been tested by **HUARUI 7LAYERS HIGH TECHNOLOGY (SUZHOU) CO., LTD.**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's SAR characteristics under the conditions specified in this report. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product certification, approval, or endorsement by A2LA or any government agencies.

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Chang Gao/ Engineer

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Peibo Sun/ Manager

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Release Control Record

Report No.	Reason for Change	Date Issued
PSU-NQN2506130117SA01	Initial release	Jul. 18, 2025



1. Description of Equipment Under Test

EUT Type*	Keyfob
Brand Name*	ikon
Model Name*	E20KF
Tx Frequency Bands (Unit: MHz)	BT-LE: 2402 ~ 2480
Uplink Modulations	BT-LE: GFSK
Maximum Tune-up Conducted Power (Unit: dBm)	BT-LE: 5dBm
Antenna Type*	Chip Antenna
HW VERSION*	ES200-MB-H103
SW VERSION*	ikonG2-V1.06
EUT Stage*	Identical Prototype

NOTE:

- *Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information, Test Lab is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.
- The above EUT information is declared by manufacturer and for more detailed features description please refers to the manufacturer's specifications or User's Manual.

3 List of Accessory:

ACCESSORIES	Brand	MODEL	Manufacturer	SPECIFICATION
Battery	Henli	CR2450	CHANGZHOU YUFENG BATTERY	3Vdc, 600mAh



2. SAR Exemption Evaluation

Following FCC KDB 447498 D01 “General SAR test exclusion guidance”

The corresponding SAR Exclusion Threshold condition, listed below:

- 1) 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:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$
 - $f(\text{GHz})$ is the RF channel transmit frequency in GHz
 - Power and distance are rounded to the nearest mW and mm before calculation
 - 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) At 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following:
 - a) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · ($f(\text{MHz})/150$)] mW, at 100MHz to 1500 MHz
 - b) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · 10] mW at > 1500 MHz and ≤ 6 GHz
- 3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.
 - a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by $[1 + \log(100/f(\text{MHz}))]$ for test separation distances > 50 mm and < 200 mm.
 - b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by $\frac{1}{2}$ for test separation distances ≤ 50 mm.
 - c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.

Smallest distance from the antenna and radiating structures or outer surface of the device

The minimum test separation distance is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander.



2.1 Maximum Tune-up Power (declared by manufacturer)

Mode	Tune-up Power
Bluetooth LE	5 dBm

2.2 SAR Test Exclusion Thresholds

Mode	Frequency (MHz)	Max. Tune-up Power (dBm)	Minimum separation distance (mm)	Calculated Result	Limit for 1-g SAR	Limit for 10-g extremity SAR	Verdict
Bluetooth LE	2480	5.0	5	1.57	3.0	7.5	Exempt from SAR

Conclusion

According to the table above, the device can meet the SAR test exclusion thresholds requirement of FCC KDB 447498 D01, and SAR evaluation is not required.

Therefore, this device complies with FCC's RF radiation exposure limits for general population without SAR evaluation.



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3. Information on the Testing Laboratories

We, Huarui 7layers High Technology (Suzhou) Co., Ltd. ,were founded in 2020 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

Huarui 7Layers High Technology (Suzhou) Co., Ltd.

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Accredited Test Lab Cert 6613.01

If you have any comments, please feel free to contact us at the following:

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