

1 Cover Page

RF Exposure Evaluation Report

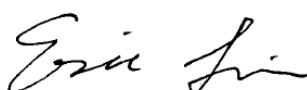
Application No.: KSCR2112000305AT
FCC ID: 2AXVM-AP5X-XXXX
Applicant: Hangzhou Microimage Software Co., Ltd.
Address of Applicant: Room 313, Unit B, Building 2, 399 Danfeng Road, Xixing Subdistrict, Binjiang District, Hangzhou, Zhejiang
Manufacturer: Hangzhou Microimage Software Co., Ltd.
Address of Manufacturer: Room 313, Unit B, Building 2, 399 Danfeng Road, Xixing Subdistrict, Binjiang District, Hangzhou, Zhejiang
Factory: Hangzhou Microimage Intelligent Technology Co., Ltd.
Address of Factory: Floor 2, Building A1, 299 Qiushi Road, Tonglu Economic Development Zone, Tonglu County, Hangzhou City, Zhejiang Province

Equipment Under Test (EUT):
EUT Name: Acoustic Imaging Camera
Model No.: HM-AP56-W/W-AI56
Trade mark: HIKMICRO
Standard(s) : FCC Rules 47 CFR §2.1093
 KDB447498 D01 General RF Exposure Guidance v06

Date of Receipt: 2021-12-10
Date of Test: 2021-12-13 to 2021-12-14
Date of Issue: 2021-12-15

| | |
|---------------------|-------|
| Test Result: | Pass* |
|---------------------|-------|

* In the configuration tested, the EUT complied with the standards specified above.



Eric Lin
Laboratory Manager



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| Revision Record | | | |
|-----------------|-------------|------------|--------|
| Version | Description | Date | Remark |
| 00 | Original | 2021-12-15 | / |
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|--------------------------|--|--------------------------------------|--|--|
| Authorized for issue by: | | | | |
| | | Damon Zhou | | |
| | | Damon Zhou / Project Engineer | | |
| | | Eric Lin | | |
| | | Eric Lin / Reviewer | | |



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3 General Information

3.1 General Description of E.U.T.

| | |
|---------------|--|
| Power supply: | DC 3.6V by Rechargeable Li-ion Battery or DC 5V 2A by USB port Battery Model: INR18650-35E-1S2P Typical Capacity: 6.7Ah 24.12Wh Rated Capacity: 6.23Ah 22.43Wh Limited Charge Voltage: 4.2V Nominal Voltage: 3.6V |
|---------------|--|

3.2 General Description of E.U.T.

| | |
|----------------------|---|
| Antenna Gain: | 5.66dBi (Provided by the manufacturer) |
| Antenna Type: | FPC Antenna |
| Channel Spacing: | 5MHz |
| Modulation Type: | 802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK) |
| Number of Channels: | 802.11b/g/n(HT20):11 802.11n(HT40):7 |
| Operation Frequency: | 802.11b/g/n(HT20): 2412MHz to 2462MHz 802.11n(HT40): 2422MHz to 2452MHz |



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3.3 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

3.4 Test Facility

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

- **CNAS (No. CNAS L4354)**

CNAS has accredited Compliance Certification Services (Kunshan) Inc. to ISO/IEC 17025:2017

General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01

Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

- **A2LA (Certificate No. 2541.01)**

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

- **FCC (Designation Number: CN1172)**

Compliance Certification Services Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

- **ISED (CAB identifier: CN0072)**

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.

Company Number: 2324E

- **VCCI (Member No.: 1938)**

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.



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4 Test Standards and Limits

4.1 FCC Radiofrequency radiation exposure 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:

$[(\text{max power of channel})/(\text{min test separation distance})]^*[\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 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
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds

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 according to 4.1 f) is applied to determine SAR test exclusion.

The practical use condition for this device is as a limb-worn accessories. So the applicable limit is 10-g extremity SAR

For 2.4G band, the device is handheld device, so the limit of worse case is

$$P_{\text{max}} \leq 7.5 * D_{\text{min}} / \sqrt{f} = 7.5 * 5 / \sqrt{2.462} = 23.9 \text{ mW}$$



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5 Measurement and Calculation

5.1 Maximum transmit power

The Power Data is based on the RF Test Report KSCR211200030501 for 2.4G

| Test Mode | Test Channel | Ant | Power [dBm] | Power [mW] |
|-----------|--------------|------|-------------|--------------|
| 11B | 2412 | Ant1 | 12.87 | 19.36 |
| 11B | 2437 | Ant1 | 13.10 | 20.42 |
| 11B | 2462 | Ant1 | 13.25 | 21.13 |
| 11G | 2412 | Ant1 | 13.26 | 21.18 |
| 11G | 2437 | Ant1 | 13.19 | 20.84 |
| 11G | 2462 | Ant1 | 13.31 | 21.43 |
| 11N20SISO | 2412 | Ant1 | 12.66 | 18.45 |
| 11N20SISO | 2437 | Ant1 | 12.82 | 19.14 |
| 11N20SISO | 2462 | Ant1 | 12.92 | 19.59 |
| 11N40SISO | 2422 | Ant1 | 12.67 | 18.49 |
| 11N40SISO | 2437 | Ant1 | 12.95 | 19.72 |
| 11N40SISO | 2452 | Ant1 | 13.01 | 20.00 |

5.2 MPE Calculation

The Max Conducted average Output Power is 21.43mW < 23.9mW, So the device is exclusion from SAR test.

--End of the Report--



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