



CTC Laboratories, Inc.

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TEST REPORT

Report No...... : **CTC20201680E05**

Applicant..... : **Lumi United Technology Co., Ltd**

Address..... : 8th Floor, JinQi Wisdom Valley, No.1 Tangling Road, Liuxian Ave, Taoyuan Residential District, Nanshan District, Shenzhen,China

Manufacturer..... : Lumi United Technology Co., Ltd

Address..... : 8th Floor, JinQi Wisdom Valley, No.1 Tangling Road, Liuxian Ave, Taoyuan Residential District, Nanshan District, Shenzhen, China

Product Name : **TVOC Air Quality Monitor**

Trade Mark..... : Aqara

Model/Type reference : AAQS-S01

Listed Model(s) : N/A

Standard..... : **EN 62479:2010**
EN 50663:2017


Date of receipt of test sample... : Nov. 10, 2020

Date of testing..... : Nov. 10, 2020 to Nov. 16, 2020

Date of issue..... : Mar. 9, 2021

Result..... : **PASS**

Compiled by:
(Printed name+signature) Lucy Lan 

Supervised by:
(Printed name+signature) Miller Ma 

Approved by:
(Printed name+signature) Walter Chen 



Testing Laboratory Name..... : **CTC Laboratories, Inc.**

Address..... : 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen, Guangdong, China

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1. TEST SUMMARY

1.1. Test Standards

The tests were performed according to following standards:

[EN 62479:2010](#)-Assessment of the compliance of low-power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)

[EN 50663:2017](#)-Generic standard for assessment of low power electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (10 MHz – 300 GHz)

1.2. Report version

| Revised No. | Date of issue | Description |
|-------------|---------------|-------------|
| 01 | Mar. 9, 2021 | Original |
| | | |
| | | |
| | | |

1.3. Test Facility

Address of the report laboratory

CTC Laboratories, Inc.

Add: 2/F., Building 1 and 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Longhua District, Shenzhen, Guangdong, China

Laboratory accreditation

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

CNAS-Lab Code: L5365

CTC Laboratories, Inc. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation. Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025:2017 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA-Lab Cert. No.: 4340.01

CTC Laboratories, Inc. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with 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.

Industry Canada (Registration No.: 9783A, CAB Identifier: CN0029)

CTC Laboratories, Inc. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 9783A on Jan, 2016.

FCC (Registration No.: 951311, Designation Number CN1208)

CTC Laboratories, Inc. 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. Registration 951311, Aug 26, 2017.

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For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China : <http://yz.cnca.cn>





2. GENERAL INFORMATION

2.1. Client Information

| | |
|---------------|--|
| Applicant: | Lumi United Technology Co., Ltd |
| Address: | 8th Floor, JinQi Wisdom Valley, No.1 Tangling Road, Liuxian Ave, Taoyuan Residential District, Nanshan District, Shenzhen, China |
| Manufacturer: | Lumi United Technology Co., Ltd |
| Address: | 8th Floor, JinQi Wisdom Valley, No.1 Tangling Road, Liuxian Ave, Taoyuan Residential District, Nanshan District, Shenzhen, China |

2.2. General Description of EUT

| | |
|-----------------------|--------------------------|
| Product Name: | TVOC Air Quality Monitor |
| Model/Type reference: | AAQS-S01 |
| Trademark: | Aqara |
| Listed models: | N/A |
| Power supply: | DC 3V |
| Hardware version: | R0 |
| Software version: | 22 |
| Zigbee | |
| Modulation: | O-QPSK |
| Operation frequency: | 2405~2480MHz |
| Channel number: | 16 |
| Channel separation: | 5 MHz |
| Antenna type: | FPC Antenna |
| Antenna gain: | 1dBi |





3. TEST ITEM AND RESULTS

3.1. RF Exposure

Limit

20mW (According to the table A.1)

Table A.1 – Example values of SAR-based P_{max} for some cases described by ICNIRP, IEEE Std C95.1-1999 and IEEE Std C95.1-2005

| Guideline / Standard | SAR limit, SAR_{max} W/kg | Averaging mass, m g | P_{max} mW | Exposure tier ^a | Region of body ^a |
|-------------------------|--------------------------------|--------------------------|-----------------|----------------------------|------------------------------------|
| ICNIRP [1] | 2 | 10 | 20 | General public | Head and trunk |
| | 4 | 10 | 40 | General public | Limbs |
| | 10 | 10 | 100 | Occupational | Head and trunk |
| | 20 | 10 | 200 | Occupational | Limbs |
| IEEE Std C95.1-1999 [2] | 1,6 | 1 | 1,6 | Uncontrolled environment | Head, trunk, arms, legs |
| | 4 | 10 | 40 | Uncontrolled environment | Hands, wrists, feet and ankles |
| | 8 | 1 | 8 | Controlled environment | Head, trunk, arms, legs |
| | 20 | 10 | 200 | Controlled environment | Hands, wrists, feet and ankles |
| IEEE Std C95.1-2005 [3] | 2 | 10 | 20 | Action level | Body except extremities and pinnae |
| | 4 | 10 | 40 | Action level | Extremities and pinnae |
| | 10 | 10 | 100 | Controlled environment | Body except extremities and pinnae |
| | 20 | 10 | 200 | Controlled environment | Extremities and pinnae |

^a Consult the appropriate standard for more information and definitions of terms.

TEST RESULTS

| Test channel | EIRP (dBm) | Output power (mW) | Limit (mW) | Results |
|--------------|------------|-------------------|------------|---------|
| LCH | 10.65 | 11.61 | 20.00 | Pass |
| MCH | 10.38 | 10.91 | | |
| HCH | 10.19 | 10.45 | | |

Note

For a more detailed features description, please refer to the RF Test Report.

*****THE END*****