



中国认可
国际互认
检测
TESTING
CNAS L0446



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Test Report

Verified code: 685495

Report No.: E20211222698901-3

Customer: Lumi United Technology Co., Ltd.

Address: Room 801-804, Building 1, Chongwen Park, Nanshan iPark, No.3370, Liuxian Avenue, Fuguang Community, Taoyuan Residential District, Nanshan District, Shenzhen, China

Sample Name: Motion Sensor P1

Sample Model: MS-S02

Receive Sample Date: Dec.24,2021

Test Date: Dec.27,2021 ~ Jan.10,2022

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

Document: 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(10MHz to 300GHz)

Test Result: Pass

Prepared By: Yang Zhaoyun Reviewed By: Jiang Tao

Approved By: Xiao Liang

GUANGZHOU GRG METROLOGY & TEST CO., LTD

Issued Date: 2022-01-18

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1 GENERAL DESCRIPTION OF EUT

1.1 APPLICANT INFORMATION

Name: Lumi United Technology Co., Ltd.
Room 801-804, Building 1, Chongwen Park, Nanshan iPark, No.3370,
Address: Liuxian Avenue, Fuguang Community, Taoyuan Residential District, Nanshan District, Shenzhen, China

1.2 MANUFACTURER

Name: Lumi United Technology Co., Ltd.
Room 801-804, Building 1, Chongwen Park, Nanshan iPark, No.3370,
Address: Liuxian Avenue, Fuguang Community, Taoyuan Residential District, Nanshan District, Shenzhen, China

1.3 BASIC DESCRIPTION OF EUT

Product Name: Motion Sensor P1
Product Model: MS-S02
Adding Model: /
Trade Name: Aqara
Power Supply: Button batteries: CR2450 DC 3V, 3mA
Frequency Band: 2405MHz-2480MHz
Modulation Type: OQPSK
Antenna Type: Internal antenna
Antenna Gain: 0.5dBi
Hardware Version: X3
Software Version: 0.0.0_0005
Sample submitting way: Provided by customer Sampling
Sample No: E20211222698901-0001, E20211222698901-0005
Note: /

2 LABORATORY AND ACCREDITATIONS

2.1 LABORATORY

The tests & measurements refer to this report were performed by Shenzhen EMC Laboratory of Guangzhou GRG Metrology & Test Co., Ltd.

Add.: No.1301 Guanguang Road Xinlan Community, Guanlan Street, Longhua District
Shenzhen, 518110, People's Republic of China.
P.C.: 518000
Tel : 0755-61180008
Fax: 0755-61180008

2.2 ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

USA A2LA(Certificate#:2861.01)

China CNAS(L0446)

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

Canada ISED (Company Number: 24897, CAB identifier:CN0069)

USA FCC (Registration Number: 759402, Designation Number:CN1198)

Copies of granted accreditation certificates are available for downloading from our web site,
<http://www.grgtest.com>

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3 TECHNICAL REQUIREMENTS SPECIFICATION IN

3.1 RF EXPOSURE EVALUATION

According to its specifications, the EUT must comply with the requirements of the following standards:

EN 62479 – 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)

Introduction:

This generic standard applies to low power 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 10 MHz to 300 GHz.

The object of this standard is to demonstrate the compliance of such apparatus with the basic restrictions on exposure of the general public to electric, magnetic and electromagnetic fields and contact current.

Compliance criteria:

All electromagnetic fields If the average power emitted by the apparatus operating in the frequency range 10 MHz to 300 GHz is less than or equal to 20 mW and the transmitting peak power is less than 20 W then the apparatus is deemed to comply with the basic restrictions without testing.

Averaging time is 6 minutes in the frequency range 10 MHz to 10 GHz. The average time is equal to $68/f^{1.05}$ minutes (where f is in GHz) in the frequency range 10 GHz to 300 GHz.

If the total supply power or the input power to the circuitry producing the greatest emissions in the device is less than or equal to 20 mW then it is assumed that the emitted power is less than 20 mW.

Pulse modulated electromagnetic fields with pulse duration less than 30 micro seconds.

For pulse of duration less than 30 microseconds at frequencies between 300 MHz and 10 GHz, there is also a basic restriction on SA. This is 2mJ kg^{-1} in any 10g of tissue in the head. For most pulses, the SAR restriction will be more stringent, but for pulses with a repetition frequency of less than 100 Hz, the SA restriction will predominate. For devices producing pulses with repetition rates below 100 Hz, the average power should be less than $20 \times \text{prf mW}$ (prf in Hz).

3.2 EVALUATION RESULTS

Zigbee:

Operating Mode with Modulation				
Packet	EIRP Level (dBm)	EIRP Level (mW)	EIRP Limit(mW)	Result
OQPSK	9.02	7.98	20	PASS

RF exposure assessment has been performed below to prove that this unit will not generate the harmful EM emission above the reference level as specified in EC Council Recommendation (1999/519/EC)

4 APPENDIX A: PHOTOGRAPH OF THE EUT

Please refer to the attached document E20211222698901-1-EUT Photo.

----- End of Report -----