

FCC RF Exposure Report

FCC ID : SQG-MT320
Equipment : WiFi 6 + Bluetooth 5.4 Module
Model No. : Sona MT320
Brand Name : Laird Connectivity
Applicant : Laird Connectivity LLC
Address : W66N220 Commerce Court, Cedarburg, WI
53012 United States Of America
Standard : 47 CFR FCC Part 2.1091
Received Date : Sep. 25, 2023
Tested Date : Oct. 17 ~ Dec. 08, 2023

We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:

Approved by:



Along Chen / Assistant Manager



Gary Chang / Manager

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Release Record

Report No.	Version	Description	Issued Date
FA392501	Rev. 01	Initial issue	Jan. 23, 2024
FA392501	Rev. 02	Product name changed	Feb. 08, 2024

1 MPE EVALUATION OF MOBILE DEVICES

1.1 LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE

Frequency Range (MHz)	Power Density (mW /cm ²)	Averaging Time (minutes)
300~1500	F/1500	30
1500~100000	1.0	30

1.2 MPE EVALUATION FORMULA

$$Pd = \frac{Pt}{4 * Pi * R^2}$$

Where

Pd= Power density in mW/cm²

Pt= EIRP in mW

Pi= 3.1416

R= Measurement distance

1.3 REFERENCE GUIDANCE

447498 D01 General RF Exposure Guidance v06

1.4 DEVIATION FROM TEST STANDARD AND MEASUREMENT PROCEDURE

None

1.5 MEASUREMENT UNCERTAINTY

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

Parameters	Uncertainty
Conducted power	±0.808 dB

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1.6 MPE EVALUATION RESULTS

Non-beamforming mode

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Maximum Tune Up Limit (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)	*Ratio	Pass / Fail
WLAN								
2412-2462	22.04	22.5	2.4	20	0.061	1	0.061	Pass
5180-5240	20.26	20.5	4.4	20	0.061	1	0.061	Pass
5260-5320	20.21	20.5	4.4	20	0.061	1	0.061	Pass
5500-5720	22.56	23.0	4.4	20	0.109	1	0.109	Pass
5745-5825	22.78	23.0	4.4	20	0.109	1	0.109	Pass
BT								
2402-2480	7.21	7.5	2.4	20	0.002	1	0.002	Pass

*Ratio = Power density / Limit.

Beamforming mode

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Maximum Tune Up Limit (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)	*Ratio	Pass / Fail
2412-2462	16.07	16.5	5.41	20	0.031	1	0.031	Pass
5180-5240	17.07	17.5	7.41	20	0.062	1	0.062	Pass
5260-5320	17.20	17.5	7.41	20	0.062	1	0.062	Pass
5500-5720	19.55	20.0	7.41	20	0.110	1	0.110	Pass
5745-5825	19.77	20.0	7.41	20	0.110	1	0.110	Pass

*Ratio = Power density / Limit.

Remarks:

For 2412~2462MHz:

Directional gain = $2.4 + 10 \cdot \log(2/1) = 5.41$ dBi

For 5180~5825MHz:

Directional gain = $4.4 + 10 \cdot \log(2/1) = 7.41$ dBi

2 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corporation (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website <http://www.icertifi.com.tw>.

Linkou

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(R.O.C.)

Kwei Shan

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St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)
No.2-1, Lane 6, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)

Kwei Shan Site II

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No.14-1, Lane 19, Wen San 3rd
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If you have any suggestion, please feel free to contact us as below information.

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