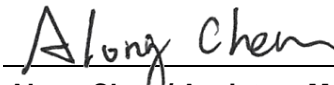


# FCC RF Exposure Report

**FCC ID** : SQG-LWBPLUS  
**Equipment** : 802.11n 2.4GHz + BT5.2 Module  
**Model No.** : Sterling LWB+  
**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** : Oct. 04, 2021  
**Tested Date** : Oct. 27 ~ Nov. 02, 2021

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 may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:

  
Along Chen / Assistant Manager

Approved by:

  
Gary Chang / Manager



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## Table of Contents

<b>1</b>	<b>GENERAL DESCRIPTION .....</b>	<b>4</b>
1.1	Information.....	4
<b>2</b>	<b>MPE EVALUATION OF MOBILE DEVICES .....</b>	<b>5</b>
2.1	LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE.....	5
2.2	MPE EVALUATION FORMULA .....	5
2.3	DEVIATION FROM TEST STANDARD AND MEASUREMENT PROCEDURE .....	5
2.4	MEASUREMENT UNCERTAINTY .....	5
2.5	MPE EVALUATION RESULTS .....	6
<b>3</b>	<b>TEST LABORATORY INFORMATION .....</b>	<b>7</b>

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## Release Record

Report No.	Version	Description	Issued Date
FA1O0407	Rev. 01	Initial issue	Dec. 10, 2021

# 1 General Description

## 1.1 Information

The device has 3 configurations as below:

Brand name	Model Name	Product Name	Part Number	Description
Laird Connectivity	Sterling LWB+	802.11n 2.4GHz + BT5.2 Module	453-00085	Chip Antenna
Laird Connectivity	Sterling LWB+	802.11n 2.4GHz + BT5.2 Module	453-00084	MHF4 Connector
Laird Connectivity	Sterling LWB+	802.11n 2.4GHz + BT5.2 Module	453-00083	SIP Module

Note: Part Number: 453-00084 was selected as a representative one for the final test

## 2 MPE EVALUATION OF MOBILE DEVICES

### 2.1 LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE

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

### 2.2 MPE EVALUATION FORMULA

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

Where

Pd= Power density in mW/cm<sup>2</sup>

Pt= EIRP in mW

Pi= 3.1416

R= Measurement distance

### 2.3 DEVIATION FROM TEST STANDARD AND MEASUREMENT PROCEDURE

None

### 2.4 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

<b>Declaration of Conformity:</b>
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
<b>Comments and Explanations:</b>
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.

## 2.5 MPE EVALUATION RESULTS

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Rated Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	*Ratio	Pass / Fail
2412~2462 (Wi-Fi)	20.35	20.5	3	20	0.045	1	0.045	Pass
2402-2480 (BT EDR)	6.61	7	3	20	0.002	1	0.002	Pass
2402-2480 (BT LE)	5.65	6	3	20	0.002	1	0.002	Pass

\*Ratio = Power density / Limit.

### 3 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**

Tel: 886-2-2601-1640

No.30-2, Ding Fwu Tsuen, Lin Kou  
District, New Taipei City, Taiwan  
(R.O.C.)

#### **Kwei Shan**

Tel: 886-3-271-8666

No.3-1, Lane 6, Wen San 3rd  
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**

Tel: 886-3-271-8640

No.14-1, Lane 19, Wen San 3rd  
St., Kwei Shan Dist., Tao Yuan  
City 333, Taiwan (R.O.C.)

If you have any suggestion, please feel free to contact us as below information.

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==END==