

# **FCC RF Exposure Report**

FCC ID	:	SQGBT700
Equipment	:	Class 1 Bluetooth Data Module
Model No.	:	BT740-SA, BT730-SA, BT740-SC, BT730-SC (Refer to item 1.1.1 for more details)
Brand Name	:	Laird Connectivity
Applicant	:	Laird Connectivity, LLC.
Address	:	W66N220 Commerce Court, Cedarburg, Wisconsin 53012, USA
Standard	:	47 CFR FCC Part 2.1091
<b>Received Date</b>	:	Mar. 25, 2021
Tested Date	:	Aug. 25 ~ Aug. 30, 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:** 

Approved by:





Along Cherd/ Assistant Manager Gary Chang / Manager



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# **Release Record**

Report No.	Version	Description	Issued Date
FA332501-04	Rev. 01	Initial issue	Oct. 28, 2021



# **1 GENERAL DESCRIPTION**

## 1.1 INFORMATION

This is a Class II Permissive Change report (C2PC).

This report is issued as a supplementary report to original report no. FA332501. The modification is changing the balun + regulator, brand name, applicant and address. All test items have been performed and were recorded in the following sections.

## 1.1.1 PRODUCT DETAILS

The following models are provided to this EUT.

	Model	Description	Difference		
	BT740-SA	Class 1 Bluetooth Data Module	CCL Interface Express Subsystem 2.1+EDR. Integrated Antenna		
	BT740-SC	Class 1 Bluetooth Data Module	CCL Interface Express Subsystem 2.1+EDR. No integrated antenna, only u.FL RF connector for external antenna		
	BT730-SA	Class 1 Bluetooth Data Module	CSR Unified Stack 2.0EDR. Integrated Antenna.		
	BT730-SC Class 1 Bluetooth Data Module		CSR Unified Stack 2.0EDR. No integrated antenna, only u.FL RF connector for external antenna		
+ +	<ul> <li>Hardware is the same on all of these modules. Only difference is the Bluetooth firmware installed.</li> <li>The above models, model <b>BT740-SA</b> and <b>BT740-SC</b> were selected as representative ones for the final test and only its data was recorded in this report.</li> </ul>				



## 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

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

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

#### 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.



## 2.5 MPE EVALUATION RESULTS

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Rated Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm²)	Limit (mW/cm²)	*Ratio	Pass / Fail
2402~2480	18.96	19.0	2	20	0.025	1	0.025	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 <u>http://www.icertifi.com.tw</u>.

#### 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.

Tel: 886-3-271-8666 Fax: 886-3-318-0345 Email: ICC\_Service@icertifi.com.tw

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