

IC RF Exposure Report

IC : 3147A-BT850
Equipment : Bluetooth 4.2 Dual Mode USB HCI Module
(Refer to item 1.1.1 for more details)
Model No. : BT850-SA
(Refer to item 1.1.1 for more details)
Brand Name : Laird
Applicant : Laird Technologies, Inc.
Address : W66N220 Commerce Court, Cedarburg,
Wisconsin 53012, USA
Standard : RSS-102 Issue 5 March 2015
Received Date : Sep. 28, 2017
Tested Date : Sep. 29 ~ Oct. 20, 2017

We, International Certification Corp., 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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Release Record

Report No.	Version	Description	Issued Date
CA791801	Rev. 01	Initial issue	Nov. 30, 2017

1 General Description

1.1 Information

1.1.1 Product Details

The following models are provided to this EUT.

Brand Name	Model Name	Product Name	Description
Laird	BT850-SA	Bluetooth 4.2 Dual Mode USB HCI Module	chip antenna
	BT850-ST		trace to external antenna
	BT860-SA	Bluetooth 4.2 Dual Mode UART HCI Module	chip antenna
	BT860-ST		trace to external antenna

2 MPE EVALUATION OF MOBILE DEVICES

RF exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm, except when the device operates as follows: at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than $1.31 \times 10^{-2} f^{0.6834}$ W (adjusted for tune-up tolerance), where f is in MHz.

2.1 RF FIELD STRENGTH LIMITS FOR DEVICE USED BY THE GENERAL PUBLIC

Frequency Range (MHz)	Power Density (W/m ²)	Averaging Time (minutes)
300-6000	$0.02619 f^{0.6834}$	6
6000-15000	10	6

2.2 MPE EVALUATION FORMULA

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

Where

Pd= Power density in W/m²
 Pt= EIRP in W
 Pi= 3.1416
 R= Measurement distance

2.3 MPE EVALUATION RESULTS

Configuration 2 : BT850-ST

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (W/m ²)	Limit (W/m ²)
2402~2480 EDR	7.68	2	20	0.018	5.35
2402~2480 LE	7.71	2	20	0.019	5.35

Configuration 4 : BT860-ST

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (W/m ²)	Limit (W/m ²)
2402~2480 EDR	7.76	2	20	0.019	5.35
2402~2480 LE	7.76	2	20	0.019	5.35

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 Corp (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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Kwei Shan

Tel: 886-3-271-8666

No. 3-1, Lane 6, Wen San 3rd St.,
Kwei Shan District, Tao Yuan City
333, Taiwan, R.O.C.

Kwei Shan Site II

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St., Kwei Shan District, 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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