

# CE RF Exposure Report

**Equipment** : BTv4.0 Dual Mode USB HCI Module  
(Please refer to section 1.1.1 for more details)

**Model No.** : BT800  
(Please refer to section 1.1.1 for more details)

**Brand Name** : Laird Technologies

**Applicant** : Laird Technologies

**Address** : W66N220 Commerce Court, Cedarburg,  
Wisconsin 53012, USA

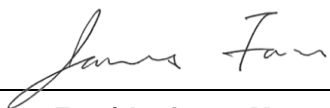
**Standard** : EN 62479:2010

**Received Date** : Apr. 07, 2017

**Tested Date** : Feb. 16 ~ Feb. 17, 2016 (for original test)  
Apr. 19 ~ Apr. 21, 2017 (for new test)

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:

  
James Fan / Assistant Manager

Approved by:

  
Gary Chang / Manager

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## Release Record

Report No.	Version	Description	Issued Date
EA362601-04	Rev. 01	Initial issue	May 03, 2017

# 1 General Description

## 1.1 Information

This report is issued as a duplicate report to the original ICC report no. EA362601-03. The modification is only changing the address of applicant.

### 1.1.1 Product Details

The following models are provided to this EUT.

Model Name	Description	Difference
BT800	BTv4.0 Dual Mode USB HCI Module	-
BT810	BTv4.0 Dual Mode USB HCI Module (BG carrier board)	BT800 module mounted onto a PCB carrier board to change footprint – no other differences.
BT820	BTv4.0 Dual Mode USB Dongle	BT800 module mounted onto a carrier board with USB connector and enclosed in plastics to allow external use.
✦ The above models, model BT810 and BT820 were selected as representative ones for the radiated final test and only its data was recorded in this report.		

### 1.1.2 Specification of the Equipment under Test (EUT)

RF General Information				
Frequency Range (MHz)	Bluetooth Mode	Ch. Frequency (MHz)	Channel Number	Data Rate
2400-2483.5	BR V	2402-2480	0-78 [79]	1 Mbps
2400-2483.5	EDR V	2402-2480	0-78 [79]	2 Mbps
2400-2483.5	EDR V	2402-2480	0-78 [79]	3 Mbps
2400-2483.5	LE V4.0	2402-2480	0-39 [40]	1 Mbps
Note 1: Bluetooth BR uses a GFSK. Note 2: Bluetooth EDR uses a combination of $\pi/4$ -DQPSK and 8DPSK. Note 3: Bluetooth LE (Low energy) uses GFSK modulation.				

### 1.1.3 Antenna Details

Ant. No.	Brand	Model	Type	Gain (dBi)	Connector
1	ACX	AT3216-B2R7HAA_3216	Chip	0.5	N/A

## **2 RF exposure evaluation**

### **2.1 Scope**

This International Standard provides simple conformity assessment methods for low-power electronic and electrical equipment to an exposure limit relevant to electromagnetic fields(EMF). If such equipment cannot be shown to comply with the applicable EMF exposure requirements using the methods included in this standard for EMF assessment, then other standards, including IEC 62311 or other (EMF) product standards, may be used for conformity assessment. This European Standard supersedes EN 50371:2002.

### **2.2 Normative References**

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Council Recommendation 1999/519/EC of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz), Official Journal L 199 of 30 July 1999.

IEC 62311, Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz – 300 GHz).

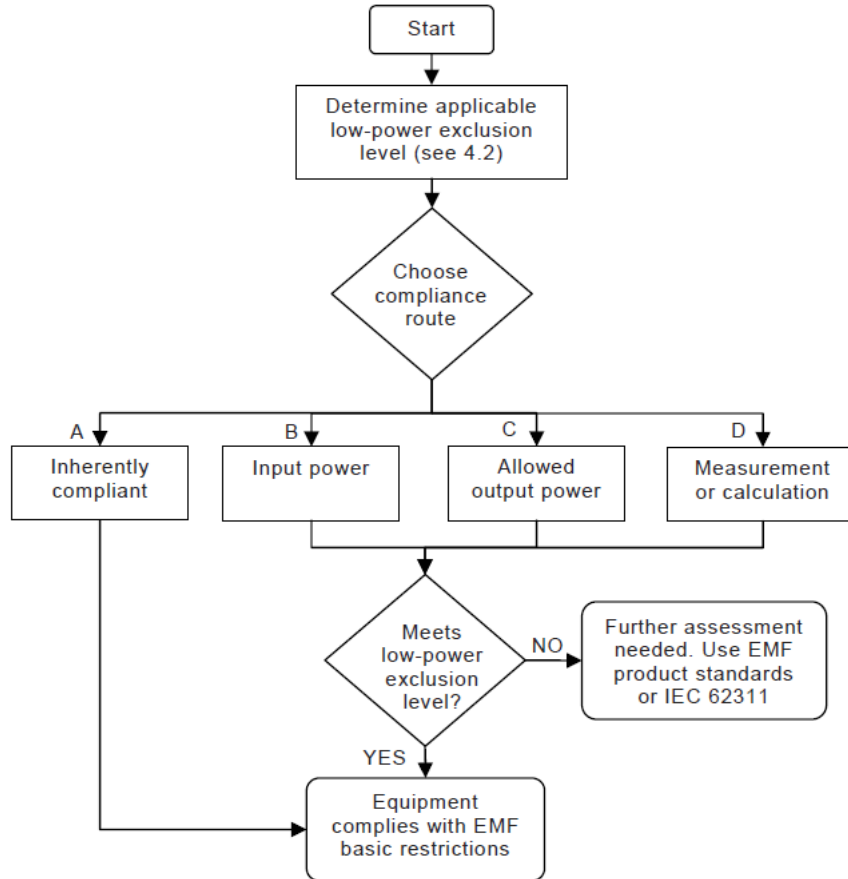
### **2.3 Compliance Criteria**

Compliance of electromagnetic emissions from electronic and electrical equipment with the basic restrictions usually is determined by measurements and, in some cases, calculation of the exposure level. If the electrical power used by or radiated by the equipment is sufficiently low, the electromagnetic fields emitted will be incapable of producing exposures that exceed the basic restrictions. This standard provides simple EMF assessment procedures for this low power equipment.

Any relevant compliance assessment procedure which is consistent with the state of the art, reproducible and gives valid results can be used.

For transmitters intended for use with more than one antenna configuration option, the combination of transmitter and antenna(s) which generates the highest available antenna power and/or average total radiated power shall be assessed.

## 2.4 Routes to show compliance with low-power exclusion level



## 2.5 Limits

Equipment where the available antenna power and/or the average total radiated power is less than or equal to the 20mW (13dBm).

## 2.6 Evaluation Results

Mode	Frequency Range (MHz)	Maximum Conducted Power (dBm)	Gain (dBi)	Maximum E.I.R.P.(dBm)	Limit (dBm)	PASS / FAIL
EDR	2402-2480	9.45	0.5	9.95	13	Pass
LE	2402-2480	9.18	0.5	9.68	13	Pass

### 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>.

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

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