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 Connectivity**
Applicant	:	**Laird Connectivity, Inc.**
Address	:	**W66N220 Commerce Court, Cedarburg, WI 53012 United States Of America**
Standard	:	**EN 62479:2010 EN 50663:2017**
Received Date	:	**Apr. 06, 2017**
Tested Date	:	**Feb. 16 ~ Mar. 23, 2016(for original test) Jun. 15 ~ Jun. 16, 2020 (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: **Approved by:**

James Fan / Assistant Manager **Gary Chang / Manager**

Testing Laboratory 2732

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Release Record

Report No.	Version	Description	Issued Date
EA490301-04	Rev. 01	Initial issue	Aug. 03, 2020

1 General Description

1.1 Information

This report is issued as a supplementary report to original ICC report no. EA490301-03, EA362601-04. The difference is concerned with following items:

- ✧ Addition standard of EN 50663:2017
- ✧ Remove model BT810
- ✧ Change brand, applicant and address.

Therefore, related test items had been performed and presented in the following sections.

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	------
BT820	BTv4.0 Dual Mode USB Dongle	BT800 module mounted onto a carrier board with USB connector.
BT800-ST	BTv4.0 Dual Mode USB HCI Module – External Antenna variant	BT800 module mounted onto a PCB carrier board with external chip antenna.
✦ The above models, only BT800-ST is selected as representative one for additional external antenna and only its data was recorded in this report.		

1.1.2 Specification of the Equipment under Test (EUT)

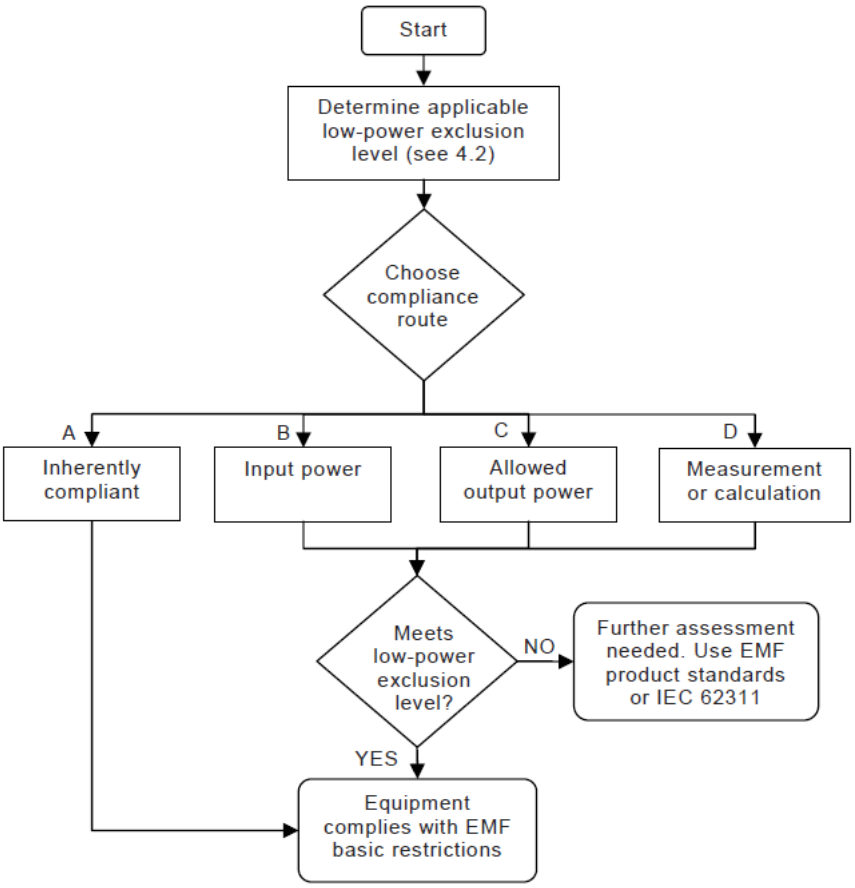
RF General Information				
Frequency Range (MHz)	**Bluetooth Mode**	**Ch. Frequency (MHz)**	**Channel Number**	**Data Rate**
2400-2483.5	BR	2402-2480	0-78 [79]	1 Mbps
2400-2483.5	EDR	2402-2480	0-78 [79]	2 Mbps
2400-2483.5	EDR	2402-2480	0-78 [79]	3 Mbps
2400-2483.5	LE V4.0	2402-2480	0-39 [40]	1 Mbps
Note 1: Bluetooth BR uses a GFSK. Note 2: Bluetooth EDR uses a combination of π/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	Remark
1	ACX	AT3216-B2R7HAA_3216	Chip	0.5	N/A	For BT800 & BT820
2	ACX	AT3216-B2R7HAA	Chip	0.5	UFL	For BT800-ST

2 RF exposure evaluation

2.1 Routes to show compliance with low-power exclusion level



2.2 Limits

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

2.3 Deviation from Test Standard and Measurement Procedure

None

2.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. 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 Evaluation Results

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

Linkou	**Kwei Shan**	**Kwei Shan Site II**
Tel: 886-2-2601-1640	Tel: 886-3-271-8666	Tel: 886-3-271-8640
No. 30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan, R.O.C.	No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C.	No. 14-1, Lane 19, Wen San 3rd 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

Tel: 886-3-271-8666
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