



EN 62479 REPORT

On Behalf of

Gembird Europe B.V.

Prepared For :	Gembird Europe B.V.
	Wittevrouwen, 56, 1358CD, Almere Haven, The Netherlands
Product Name:	Bluetooth keyboard
Trademark:	N/A
Model :	(DR)KB-BT-001,KB-P6-BT,KB-3-BT,KB-BTF1/F2/F3-B/W,KB-BT3/BT4
Prepared By :	Shenzhen BCTC Technology Co., Ltd. A. Floor 3, 44 Building, Tanglang Industrial Park B, Taoyuan Street, Nanshan District, Shenzhen, China
Test Date:	Nov. 15, 2013
Date of Report :	Nov. 15, 2013
Report No.:	BCTC-13041199



TEST REPORT EN 62479: 2010	
Assesment of the compliance of low-power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10MHz to 300GHz)	
Report Reference No.	BCTC-13041199
Date of issue	Nov. 15, 2013
Total number of pages	11 pages
Testing Laboratory	Shenzhen BCTC Technology Co., Ltd.
Address	A. Floor 3, 44 Building, Tanglang Industrial Park B, Taoyuan Street, Nanshan District, Shenzhen, China
Applicant's name	Gembird Europe B.V.
Address	Wittevrouwen, 56, 1358CD, Almere Haven, The Netherlands
Test specification:	
Standard	EN 62479: 2010
Test procedure	CCA
Non-standard test method	N/A
Copyright © 2007 IEC System for Conformity Testing and Certification of Electrical Equipment (IECEE), Geneva, Switzerland. All rights reserved.	
This publication may be reproduced in whole or in part for non-commercial purposes as long as the IECEE is acknowledged as copyright owner and source of the material. IECEE takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.	
This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.	
Test item description	Bluetooth keyboard
Trade Mark	N/A
Manufacturer	Gembird Electronics Ltd.
	5/F, Building B, Shifeng Industry District, Huaning Road, Dalang St., Longhua, Bao'an, Shenzhen, Guangdong, China
Model/Type reference	(DR)KB-BT-001,KB-P6-BT,KB-3-BT,KB-BTF1/F2/F3-B/W,KB-BT3/BT4
Ratings	1.5VDC from battery



Name and address of the testing laboratory : Shenzhen BCTC Technology Co.,Ltd.

A. Floor 3, 44 Building, Tanglang Industrial Park B,
Taoyuan Street, Nanshan District, Shenzhen, China

Date of Test:

Nov. 15, 2013

Prepared by(Engineer) :

Jeff Fu

Reviewer(Quality Manager) :

Sophie Lee

Approved&Authorized Signer(Manager) :

Casey Wang





Artwork of marking plate

Bluetooth keyboard

**Model : (DR)KB-BT-001,KB-P6-BT,KB-3-BT,KB-BTF1/F2/F3-B/W
KB-BT3/BT4**

1.5VDC ---



Gembird Europe B.V.

1. The above marking plate is only a draft artwork to show the product ratings, model name.



Possible test case verdicts:

- test case does not apply to the test object : N (N/A)
- test object does meet the requirement : P (Pass)
- test object does not meet the requirement : F (Fail)

General remarks:

The test results presented in this report relate only to the object tested.
This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.
"(See Enclosure #)" refers to additional information appended to the report.
"(See appended table)" refers to a table appended to the report.

Note: This TRF includes EN Group Differences together with National Differences and Special National Conditions, if any. All Differences are located in the Appendix to the main body of this TRF.

Throughout this report a comma is used as the decimal separator.

Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be produced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

General product information:

N/A



EN 62479		
Clause	Requirement – Test	Verdict
1	Scope	
2	Normative references	
3	Terms and definitions	
4	Compliance criteria	
4.1	General considerations	P
	<p>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.</p> <p>Any relevant compliance assessment procedure which is consistent with the state of the art, reproducible and gives valid results can be used.</p> <p>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.</p> <p>Four routes, as illustrated in Figure 1 and described as follows, can be used to demonstrate compliance with this standard:</p> <p>A Typical usage. installation and the physical characteristics of equipment make it inherently compliant with the applicable EMF exposure levels such as those listed in the bibliography. This low-power equipment includes unintentional (or non-intentional) radiators, for example incandescent light bulbs and audio/visual (A/V) equipment, information technology equipment (ITE) and multimedia equipment (MME) that does not contain radio transmitters.</p> <p>B The input power level to electrical or electronic components that are capable of radiating electromagnetic energy in the relevant frequency range is so low that the available antenna power and/or the average total radiated power cannot exceed the low-power exclusion level defined in 4.2,</p> <p>C The available antenna power and/or the average total radiated power are limited by product standards for transmitters to levels below the low-power exclusion level defined in 4.2.</p> <p>D Measurements or calculations show that the available antenna power and/or the average total radiated power are below the low-power exclusion level defined in 4.2.</p> <p>If none of these routes can be used, then the equipment is deemed to be out of the scope of this standard and EMF assessment for conformity assessment purposes shall be made according to other standards, such as IEC 62311 or other EMF product standards.</p>	P
4.2	Low-power exclusion level(Pmax)	P



EN 62479		
Clause	Requirement – Test	Verdict
	<p>Low-power electronic and electrical equipment is deemed to comply with the provisions of this standard if it can be demonstrated using routes B, C, or D that the available antenna power and/or the average total radiated power is less than or equal to the applicable low-power exclusion level Pmax.</p> <p>For wireless devices operated closed to a person's body with available antenna powers and/or average total radiated powers higher than the Pmax values given in Annex A, the alternative Pmax values described in Annex B can also be used</p> <p>For low-power equipment using pulsed signals, other limits may apply in addition to those considered in Annex A and Annex B. Both icnirp guidelines and IEEE standards [2],[3] have specific restrictions on exposures to pulsed fields, and the requirements of those standards with respect to exposure to pulses shall be met.</p>	P
4.3	Expose to multiple transmitting sources	N
	If an equipment under test is equipped with multiple intentional radiators, the overall conformity assessment might require more than just the assessment of conformity of each one of the radiators separately. The effect of multiple intentional radiators should be considered in the conformity assessment process	N

From results of report BCTC-13041199 can be assumed that the compliance criteria is fulfilled (max. radiated power is less than 20mW). The assumption is made with an uncertainty of 30%.

*EN 62479: 2010"4.1(D) & 4.2

Measurements or calculations show that the available antenna power and/or the average total radiated power are below the low-power exclusion level defined in 4.2(Pmax: 20mW).



ANNEX A:

Photo-documentation

Photo 1



Photo 2



Photo 3

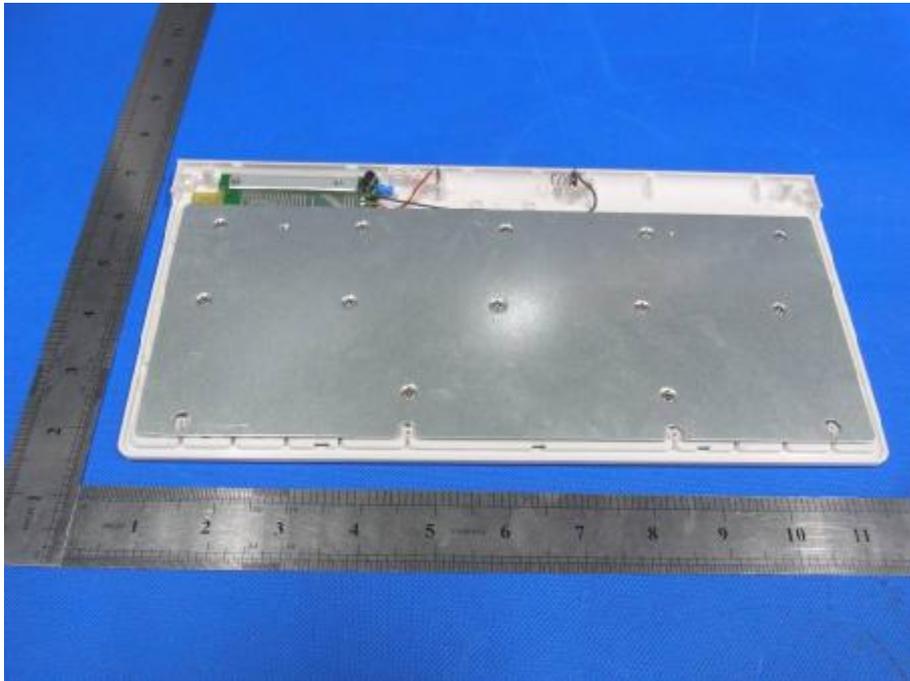


Photo 4

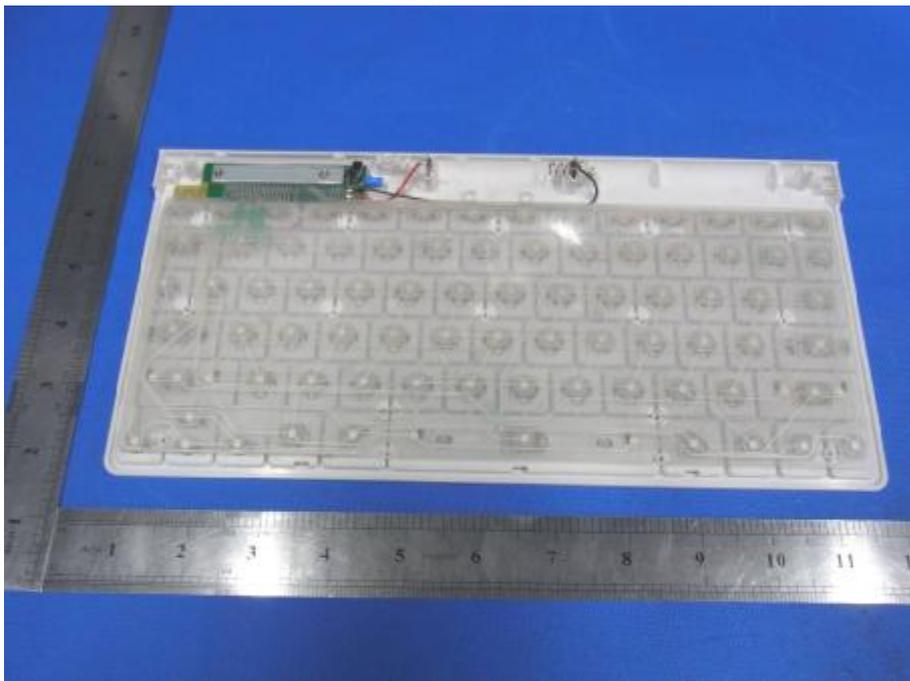


Photo 5

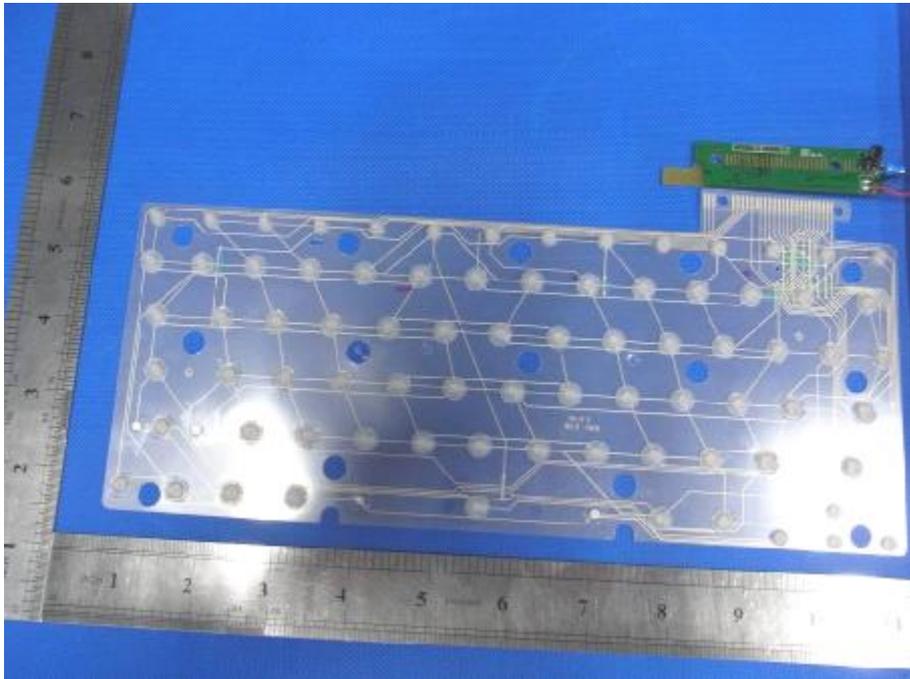
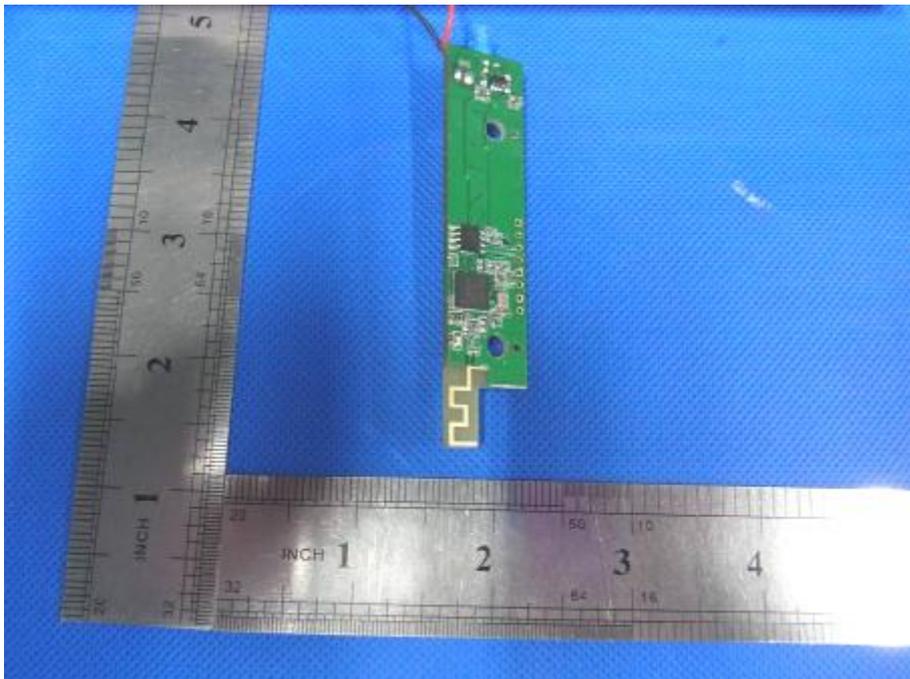


Photo 6



***** END OF REPORT *****