# **BLUE BAMBOO (HK) LIMITED**

### **Printer**

Main Model: P10 Serial Model: N/A

February 11, 2014 Report No.: 13021194-FCC-H1



(This report supersedes none)

Modifications made to the product: None

This Test Report is Issued Under the Authority of:

Deon Dai
Compliance Engineer

Alex Liu
Technical Manager

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Test result presented in this test report is applicable to the representative sample only.

# RF Exposure Evalution Report





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# **Laboratory Introduction**

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**Accreditations for Conformity Assessment** 

Country/Region	Scope
USA	EMC, RF/Wireless, Telecom
Canada	EMC, RF/Wireless, Telecom
Taiwan	EMC, RF, Telecom, Safety
Hong Kong	RF/Wireless ,Telecom
Australia	EMC, RF, Telecom, Safety
Korea	EMI, EMS, RF, Telecom, Safety
Japan	EMI, RF/Wireless, Telecom
Singapore	EMC, RF, Telecom
Europe	EMC, RF, Telecom, Safety

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### 1 EXECUTIVE SUMMARY & EUT INFORMATION

The purpose of this test programme was to demonstrate compliance of the BLUE BAMBOO (HK) LIMITED, Printer and model: P10 against the current Stipulated Standards. The Printer has demonstrated compliance with the § 15.247 (i), §2.1093.

### **EUT Information**

EUT Description	Printer
Main Model	P10
Serial Model	N/A
Antenna Gain	1 dBi
Input Power	DC 5V 500mA (Built-in a 7.4V/1000mAh Li-ion battery)
Classification Per Stipulated Test Standard	§ 15.247 (i), §2.1093

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# 2 TECHNICAL DETAILS

	TECHTOTIE DETITIES	
Purpose	Compliance testing of Printer with stipulated standard	
Applicant / Client	BLUE BAMBOO (HK) LIMITED Unit 1001, Lucky Building, No.39Wellington Street	
Manufacturer	Shera Technology (Kunshan) Co., Ltd No.377 Changjiang North Road Kunshan Jiangsu 215300 China	
SIEMIC (Nanjing-China) NO.2-1,Longcang Dadao, Yul Laboratory performing the tests  Tel: +86(25)86730 Fax: +86 Email: China		
Test report reference number	13021194-FCC-H1	
Date EUT received	January 20, 2014	
Standard applied § 15.2		
Dates of test (from – to)	January 28, 2014	
No of Units :	#1	
<b>Equipment Category:</b>	Spread Spectrum System/Device	
Trade Name :	Blue Bamboo	
RF Operating Frequency (ies)	Bluetooth: 2402-2480 MHz (TX/RX)	
Number of Channels	Bluetooth: 79	
Modulation	Bluetooth: GFSK&π/4-DQPSK&8DPSK	
Port	USB Port	
FCC ID	UWJP10	



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# **MODIFICATION**

**NONE** 

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# 4 TEST SUMMARY

The product was tested in accordance with the following specifications. All testing has been performed according to below product classification:

### **Test Results Summary**

FCC Rules	Description of Test	Result
§15.247 (i), §2.1093	RF Exposure	Compliance

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## MEASUREMENTS, EXAMINATION AND DERIVED RESULTS

### 5.1 §15.247 (i) and §2.1093/ – RF Exposure

### **Standard Requirement:**

According to §15.247 (i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] ·  $[\sqrt{f_{(GHz)}}] \le 3.0$  for 1-g SAR and  $\le 7.5$  for 10-g extremity SAR, <sup>16</sup> where

- $f_{(GHz)}$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation<sup>17</sup>
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Routine SAR evaluation refers to that specifically required by § 2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to qualify for TCB approval.

One antenna is available for the EUT (BT product). The minimum separation distances is 5 mm.

The maximum average output power(turn-up power) in low channel of BT is -12.93 dBm=0.05 mW

The calculation results=  $0.05/5* \sqrt{2402}=0.015<3$ 

The maximum average output power(turn-up power) in middle channel of BT is -12.96 dBm=0.05 mW

The calculation results=  $0.05/5* \sqrt{2441}=0.016<3$ 

The maximum average output power(turn-up power) in high channel of BT is -12.30 dBm=0.06 mW

The calculation results=  $0.06/5* \sqrt{2480}=0.019<3$ 

According to KDB 447498, no stand-alone required for BT antenna, and no simultaneous SAR measurement is required.

Test Result: Pass