

# RF Exposure REPORT

FCC ID: 2AIOC-BWD19AAA08

Product: WIRELESS CHARGING CLOCK RADIO WITH BLUETOOTH SPEAKER

Model No.: BWD19AAA08

Additional Model No.: HKWP913

Trade Mark: blackweb

Report No.: TCT190121E022

Issued Date: Jan. 29, 2019

Issued for:

**HANK ELECTRONICS CO., LTD.**

Floor 2nd-7th, A8, Hongye Industry City, Lezhujiao, Zhoushi Road, Baoan District, Shenzhen, China

Issued By:

**Shenzhen Tongce Testing Lab.**

1B/F., Building 1, Yibaolai Industrial Park, Qiaotou, Fuyong, Baoan District, Shenzhen, Guangdong, China

TEL: +86-755-27673339

FAX: +86-755-27673332

**Note:** This report shall not be reproduced except in full, without the written approval of Shenzhen Tongce Testing Lab. This document may be altered or revised by Shenzhen Tongce Testing Lab. personnel only, and shall be noted in the revision section of the document. The test results in the report only apply to the tested sample.

**TABLE OF CONTENTS**

1. Test Certification ..... 3

2. EUT Description..... 4

3. Facilities and Accreditations ..... 5

    3.1. Facilities ..... 5

    3.2. Location ..... 5

4. Technical Requirements Specification ..... 6

## 1. Test Certification

<b>Product:</b>	WIRELESS CHARGING CLOCK RADIO WITH BLUETOOTH SPEAKER
<b>Model No.:</b>	BWD19AAA08
<b>Additional Model No.:</b>	HKWP913
<b>Trade Mark:</b>	<b>blackweb</b>
<b>Applicant:</b>	HANK ELECTRONICS CO., LTD.
<b>Address:</b>	Floor 2nd-7th, A8, Hongye Industry City, Lezhujiao, Zhoushi Road, Baoan District, Shenzhen, China
<b>Manufacturer:</b>	HANK ELECTRONICS CO., LTD.
<b>Address:</b>	Floor 2nd-7th, A8, Hongye Industry City, Lezhujiao, Zhoushi Road, Baoan District, Shenzhen, China
<b>Date of Test:</b>	Jan. 22, 2019 – Jan. 28, 2019
<b>Applicable Standards:</b>	47 CFR Part 1.1307

The above equipment has been tested by Shenzhen Tongce Testing Lab. and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Tested By:



Brews Xu

Date:

Jan. 28, 2019

Reviewed By:



Beryl Zhao

Date:

Jan. 29, 2019

Approved By:



Tomsin

Date:

Jan. 29, 2019

## 2. EUT Description

<b>Product:</b>	WIRELESS CHARGING CLOCK RADIO WITH BLUETOOTH SPEAKER
<b>Model No.:</b>	BWD19AAA08
<b>Additional Model No.:</b>	HKWP913
<b>Trade Mark:</b>	<b>blackweb</b>
<b>Hardware Version:</b>	A5
<b>Software Version:</b>	V1
<b>Bluetooth version:</b>	V5.0
<b>Operation Frequency:</b>	2402MHz~2480MHz
<b>Transfer Rate:</b>	1/2 Mbits/s
<b>Number of Channel:</b>	79
<b>Modulation Type:</b>	GFSK, $\pi/4$ -DQPSK
<b>Modulation Technology:</b>	FHSS
<b>Antenna Type:</b>	PCB Antenna
<b>Antenna Gain:</b>	0dBi
<b>Power Supply:</b>	AC 120V/60Hz
<b>AC adapter:</b>	Adapter Information: MODEL: A241-0503200U INPUT: AC 100-240V, 50/60Hz, 0.8A OUTPUT: DC 5V, 3200mA
<b>Remark:</b>	All models above are identical in interior structure, electrical circuits and components, and just model names are different for the marketing requirement.

### 3. Facilities and Accreditations

#### 3.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

- FCC - Registration No.: 645098

Shenzhen Tongce Testing Lab

The 3m Semi-anechoic chamber has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A-1

The 3m Semi-anechoic chamber of Shenzhen TCT Testing Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing

#### 3.2. Location

Shenzhen Tongce Testing Lab

Address: 1B/F., Building 1, Yibaolai Industrial Park, Qiaotou, Fuyong, Baoan District, Shenzhen, Guangdong, China

TEL: +86-755-27673339

## 4. Technical Requirements Specification

### Applicable Standard

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

Remark: 1) The maximum output power for antenna is 6.46dBm (4.43mW) at 2480MHz, 0dBi antenna gain(with 1.00 numeric antenna gain.)

2) For mobile or fixed location transmitters, no SAR consideration applied. The minimum separation generally be used is at least 20cm, even if the calculation indicate that the MPE distance would be lesser.

### Calculation

$$\text{Given } E = \frac{\sqrt{30 \times P \times G}}{d} \quad \& \quad S = \frac{E^2}{3770}$$

Where  $E$  = Field Strength in Volts / meter

$P$  = Power in Watts

$G$  = Numeric antenna gain

$d$  = Distance in meters

$S$  = Power Density in milliwatts / square centimeter

### Maximum Permissible Exposure

output power= 4.43mW

Numeric Antenna gain= 1.00

Substituting the MPE safe distance using  $d=20\text{cm}$  into above equation.

Yields:

$$S = 0.000199 \times P \times G$$

Where  $P$  = Power in mW

$G$  = Numeric antenna gain

$S$  = Power density in  $\text{mW}/\text{cm}^2$

$$\text{Power density} = 0.000882 \text{mW}/\text{cm}^2$$

(For mobile or fixed location transmitters, the maximum power density is  $1.0 \text{mW}/\text{cm}^2$  even if the calculation indicates that the power density would be larger.)

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