

RF Exposure REPORT

FCC ID: 2AIOC-IR02W

Product: IR Transceiver

Model No.: HKWL-IR02W

Additional Model No.: EIR6-1001-BLK, XHH7-1001-BLK

Trade Mark: N/A

Report No.: TCT180822E016

Issued Date: Aug. 31, 2018

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.

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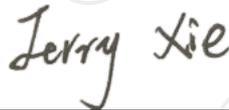
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1. Test Certification

Product:	IR Transceiver
Model No.:	HKWL-IR02W
Additional Model No.:	EIR6-1001-BLK, XHH7-1001-BLK
Trade Mark:	N/A
Applicant:	HANK ELECTRONICS CO., LTD.
Address:	Floor 2nd-7th, A8, Hongye Industry City, Lezhujiao, Zhoushi Road, Baoan District, Shenzhen, China
Manufacturer:	HANK ELECTRONICS CO., LTD.
Address:	Floor 2nd-7th, A8, Hongye Industry City, Lezhujiao, Zhoushi Road, Baoan District, Shenzhen, China
Date of Test:	Aug. 23, 2018 – Aug. 30, 2018
Applicable Standards:	47 CFR Part 1.1307 47 CFR Part 1.1310

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:



Jerry Xie

Date:

Aug. 30, 2018

Reviewed By:



Beryl Zhao

Date:

Aug. 31, 2018

Approved By:



Tomsin

Date:

Aug. 31, 2018

2. EUT Description

Product:	IR Transceiver
Model No.:	HKWL-IR02W
Additional Model No.:	EIR6-1001-BLK, XHH7-1001-BLK
Trade Mark:	N/A
Hardware Version:	V1.0
Software Version:	V1.0
Operation Frequency:	2412MHz~2462MHz (802.11b/802.11g/802.11n(HT20))
Transfer Rate:	802.11b: 1/ 2/5.5/11Mbps 802.11g: 6/9/12/18/24/36/48/54Mbps 802.11n-HT20: Up to 150Mbps
Modulation Type:	DSSS(802.11b) OFDM (802.11g/802.11n)
Antenna Type:	PCB Antenna
Antenna Gain:	0dBi
Power Supply:	AC 120V/60Hz
AC adapter:	Adapter Information: Model: BI12T-050100-BdUU Input: AC 100-240V, 50/60Hz, 0.5A Output: DC 5V, 1A
Remark:	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 18.21dBm (66.22mW) at 2412MHz, 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= 66.22mW

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 mW/cm²

$$\text{Power density} = 0.013178 \text{ mW/cm}^2$$

(For mobile or fixed location transmitters, the maximum power density is 1.0 mW/cm² even if the calculation

indicates that the power density would be larger.)

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