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国际互认  
检测  
TESTING  
CNAS L5313



DEKRA

## RF Exposure Evaluation Declaration

Product Name : Wahoo GPS BIKE COMPUTER

Model No. : WFCC3

FCC ID : PADWF115

Applicant : Wahoo Fitness, LLC.

Address : 90 W. Wieuca Road, #110, Atlanta, Georgia, 30342  
United States

Date of Receipt : Dec. 27, 2016

Test Date : Dec. 27, 2016~ Jan. 25, 2017

Issued Date : Feb. 07, 2017

Report No. : 16C2133R-RF-US- P20V01

Report Version : V 1.1

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by CNAS, TAF or any agency of the government.



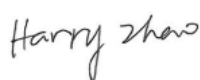
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# Test Report Certification

Issued Date : Feb. 07, 2017

Report No. : 16C2133R-RF-US-P20V01



Product Name : Wahoo GPS BIKE COMPUTER  
Applicant : Wahoo Fitness, LLC..  
Address : 90 W. Wieuca Road, #110, Atlanta, Georgia, 30342 United States  
Manufacturer : GoerTek Inc.  
Address : NO 268 DONGFANG RD NEW&HIGH-TECH INDUSTRY  
DEVELOPMENT ZONE WEIFANG, SHANDONG 261031  
Model No. : WFCC3  
FCC ID : PADWF115  
Brand Name : Wahoo Fitness  
EUT Voltage : DC 3.8V  
Test Voltage : AC120V/60Hz  
Applicable Standard : KDB 447498D01V06  
FCC Part1.1310  
Test Result : Complied  
Performed Location : DEKRA Testing and Certification (Suzhou) Co., Ltd.  
No.99 Hongye Rd., Suzhou Industrial Park, Suzhou, 215006,  
Jiangsu, China  
TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098  
FCC Registration Number: 800392  
Documented By :   
(Adm. Specialist: Kathy Feng)  
Reviewed By :   
(Senior Engineer: Frank He )  
Approved By :   
(Engineering Manager: Harry Zhao )

## 1. RF Exposure Evaluation

### 1.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

#### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
300-1500	--	--	F/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500	--	--	F/1500	6
1500-100,000	--	--	1	30

F= Frequency in MHz

Friis Formula

Friis transmission formula:  $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

$P_d$  = power density in mW/ cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

G = gain of antenna in linear scale

$\pi$  = 3.1416

R = distance between observation point and center of the radiator in cm

$P_d$  is the limit of MPE, 1 mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

## 1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18°C and 78% RH.

## 1.3. Test Result of RF Exposure Evaluation

Product	:	Wahoo GPS BIKE COMPUTER
Test Item	:	RF Exposure Evaluation
Test Site	:	AC-6

### ● Antenna Information

Model No.	N/A								
Antenna manufacturer	HWCHAN								
Antenna Delivery	<input checked="" type="checkbox"/>	1*TX+1*RX		<input type="checkbox"/>	2*TX+2*RX		<input type="checkbox"/>	3*TX+3*RX	
Antenna technology	<input checked="" type="checkbox"/>	SISO							
	<input type="checkbox"/>	MIMO	<input type="checkbox"/>	Basic					
			<input type="checkbox"/>	CDD					
			<input type="checkbox"/>	Sectorized					
			<input type="checkbox"/>	Beam-forming					
Antenna Type	<input type="checkbox"/>	External	<input type="checkbox"/>	Dipole					
			<input type="checkbox"/>	Sectorized					
	<input checked="" type="checkbox"/>	Internal	<input checked="" type="checkbox"/>	PIFA					
			<input type="checkbox"/>	PCB					
			<input type="checkbox"/>	Ceramic Chip Antenna					
			<input type="checkbox"/>	Metal plate type F antenna					
Antenna Technology		Ant Gain (dBi)							
<input checked="" type="checkbox"/>	SISO		3.09						

- Power Density:

**Standalone modes:**

Test Mode	Frequency Band (MHz)	Maximum Output Power (dBm)	Power Density at R = 20 cm (mW/cm <sup>2</sup> )	Limit of Power Density S(mW/cm <sup>2</sup> )
BT	2400~2483.5	14.07	0.0051	1
WIFI	2412~2462	27.22	0.1049	1

**Simultaneous transmission:**

Test Mode	Frequency Band (MHz)	Maximum Output Power (dBm)	Power Density at R = 20 cm (mW/cm <sup>2</sup> )	Limit of Power Density S(mW/cm <sup>2</sup> )
BT	2400~2483.5	14.07	0.0051	1
WIFI	2412~2462	27.22	0.1049	1
Simultaneous transmission power density			0.11	1

Note: The Simultaneous transmission power density is 0.11 mW/cm<sup>2</sup> for Wahoo GPS BIKE COMPUTER without any other radio equipment.

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