RF EXPOSURE EVALUATION REPORT

Issued to

KRONOZ

For

Bluetooth watch

Model Name	:	ZeWatch
Trade Name	:	N/A
Brand Name	:	MY KRONOZ
FCC ID	:	2AA7D-ZEWH1
Standard	:	47CFR 2.1093 KDB 447498 D01v05r01 General RF Exposure Guidance
Test date	:	2013-11-11
Issue date	:	2013-11-11

by

Shenzhen Morlab Communications Technology Co., Ltd.
FL.3, Building A, FeiYang Science Park, No.8 LongChang Road,Block 67, BaoAn District,
ShenZhen, GuangDong Province, P. R. China 518101

Tested by	Zou Jian	***Approved by***	Zeng Dexin	***Reviewed by***	Zhu Zhan
	Zou Jian (Test Engineer)		Zeng Dexin (Chief Engineer)		Zhu Zhan (SAR Specialist)
Date	2013.11.11	***Date***	2013.11.11	***Date***	2013.11.11

DIRECTORY

Change History		
Issue	Date	Reason for change
1.0	Nov. 11, 2013	First edition

1. TESTING LABORATORY

1.1 Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China 518101

1.2 Accreditation Certificate

Accredited Testing Laboratory:	No. CNAS L3572

2. TECHNICAL INFORMATION

Note: the Following data is based on the information by the applicant.

2.1 Identification of Applicant

Company Name:	KRONOZ
Address:	Route de Valavran 96 1294 Genthod, Switzerland

2.2 Identification of Manufacturer

Company Name:	Guangdong Appscomm Co.,Ltd
Address:	Room 903, Block C3, Innovation Building, No.182, Science Ave, Science Industry Zone, LuoGang District, Guangzhou, China

2.3 Equipment Under Test (EUT)

Model Name:	ZeWatch
Trade Name:	N/A
Brand Name:	MY KRONOZ
Hardware Version:	V1.0
Software Version:	V1.0
Frequency Bands:	Bluetooth:2402-2480MHz
Modulation Mode:	Bluetooth:GFSK
Antenna type:	Fixed Internal Antenna
Development Stage:	Identical prototype
Battery Model:	302425
Battery specification:	320mAh3.8V

2.3.1 Identification of all used EUT

The EUT identity consists of numerical and letter characters, the letter character indicates the test sample, and the Following two numerical characters indicate the software version of the test sample.

EUT Identity	Hardware Version	Software Version
1#	V1.0	V1.0

2.4 Applied Reference Documents

Leading reference documents for testing:

No.	Identity	Document Title
1	**47 CFR§2.1093**	Radiofrequency Radiation Exposure Evaluation: Portable Devices
2	**KDB 447498 D1v05r01**	General RF Exposure Guidance

3. DEVICE CATEGORY AND RF EXPOSURE LIMIT

Per user manual, this device is a Bluetooth watch with Bluetooth function. Based on FCC OET65c and 47CFR 2.1093, this device belongs to portable device category with General Population/Uncontrolled exposure.

Portable Devices:

47CFR 2.1093(b)

For purposes of this section, a portable device is defined as a transmitting device designed to be used so that the radiating structure(s) of the device is/are within 20 centimeters of the body of the user.

GENERAL POPULATION / UNCONTROLLED EXPOSURE

47CFR 2.1093(d)(2)

Limits for General Population/Uncontrolled exposure: 0.08 W/kg as averaged over the whole-body and spatial peak SAR not exceeding 1.6 W/kg as averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the hands, wrists, feet and ankles where the spatial peak SAR shall not exceed 4 W/kg, as averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). General Population/Uncontrolled limits apply when the general public may be exposed, or when persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or do not exercise control over their exposure. Warning labels placed on consumer devices such as cellular telephones will not be sufficient reason to allow these devices to be evaluated subject to limits for occupational/controlled exposure in paragraph (d)(1) of this section.

4. Measurement Of Conducted Peak Output Power.

1. Bluetooth peak output power

Band	Channel	Frequency (MHz)	Output Power(dBm)
			GFSK
BT	0	2402	3.818
	38	2441	3.109
	79	2480	2.872

5. RF Exposure Evaluation

The Bluetooth watch only incorporates a Bluetooth transmitter, so standalone SAR evaluation is required for Bluetooth and simultaneous SAR is not required.

Standalone transmission SAR evaluation

According to KDB 447498 section 4.3.1, the 1-g SAR test exclusion thresholds at test separation distances≤ 50 mm are determined by:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]·[√f(GHz)] ≤ 3.0
The maximum tune-up limit power is 3.16 mW @ 2.4GHz
For distance lower than 5mm, use 5mm as the most conservative minimum test separation distance,
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]·[√f(GHz)] =0.979≤ 3.0

So SAR evaluation is not required for this Bluetooth watch..