REPORT No. : SZ18090171S03

RF EXPOSURE EVALUATION REPORT

APPLICANT	:	Coros Wearables Inc.
PRODUCT NAME	:	APEX 46mm
MODEL NAME	:	B15
BRAND NAME	:	COROS
FCC ID	:	2AEHH-B15
STANDARD(S)	:	47CFR 2.1093 KDB 447498
ISSUE DATE	:	2018-10-22

Reviewed By: Gan Yueming

Gan Yueming (Reviewer)

Approved By: Peng Huarui

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MORLAB

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DIRECTORY

Change History		
Issue	**Date**	**Reason for change**
1.0	2018-10-22	First edition

1. Technical Information

Note: Provide by manufacturer.

1.1 Applicant and Manufacturer Information

Applicant:	Coros Wearables Inc.
Applicant Address:	No.1844 GRAHAM LANE,SANTA CLARA,CA 95050, SANTA CLARA, California,United States
Manufacturer:	Dongguan yuanfeng technology co.,LTD
Manufacturer Address:	FL.1-3 and 5 Building A ,No.18, Industrial East Rd., Songshan Lake Development Zone, Dongguan, China

1.2 Equipment Under Test (EUT) Description

EUT Type:	APEX 46mm
Hardware Version:	V5.00
Software Version:	V1.16.0920
Frequency Bands:	Bluetooth: 2402MHz-2480MHz
Modulation Mode:	Bluetooth: GFSK
Antenna Type:	LOOP Antenna
Antenna Gain:	-9.44dBi

1.3 Photographs of the EUT

1. EUT Front View

2. EUT Back View

1.3.1 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#	V5.00	V1.16.0920

1.4 Applied Reference Documents

Leading reference documents for testing:

No.	Identity	Document Title
1	47 CFR§2.1093	Radio Frequency Radiation Exposure Evaluation: portable devices
2	KDB 447498 D01v06	General RF Exposure Guidance

2. Device Category and RF Exposure Limit

Per user manual, this device is a Bluetooth watch. Based on 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.

3. Measurement of RF Output Power

1. Bluetooth output power

Mode	Channel	Frequency (MHz)	Peak power (dBm)
LE	CH 00	2402	0.089
	CH 19	2440	0.063
	CH 39	2480	-0.103
Tune-up Limit			0.500

Note: According to KDB 447498, maximum source-based time-average power will be used for calculating MPE.

4. RF Exposure Evaluation

The device only incorporates a Bluetooth watch, 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**1.12mW @ 2.402GHz**
When Bluetooth keyboard is used on the hand/head, so 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)] =**0.35**≤3.0

So SAR evaluation is not required for this device.
Note: Declaration of the tune-up limit is 0.50dBm.

Annex A General Information

1. Identification of the Responsible Testing Laboratory

Company Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Department:	Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Responsible Test Lab Manager:	Mr. Su Feng
Telephone:	+86 755 36698555
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2. 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

END OF REPORT