



BUREAU  
VERITAS

Test Report No.: FS170105N019

## RF EXPOSURE REPORT

Applicant	Sensoro Co., Ltd.
Address	Room 2807, Building 1B, Wangjing SOHO, No10 Wangjing Street, Chaoyang District, Beijing, China

Manufacturer or Supplier	Sensoro Co., Ltd.
Address	Room 2807, Building 1B, Wangjing SOHO, No10 Wangjing Street, Chaoyang District, Beijing, China
Product	α Base Station
Brand Name	sensoro
Model	BST-10B
Additional Model & Model Difference	N/A
Date of tests	Jan. 15, 2017 ~ Feb. 20, 2017

**FCC Part 2 (Section 2.1091)**

**KDB 447498 D01**

**IEEE C95.1**

**CONCLUSION: The submitted sample was found to COMPLY with the test requirement**

Tested by Breeze Jiang Project engineer/ EMC Department	Approved by Glyn He Supervisor / EMC Department

Date: Apr. 24, 2017

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## **RELEASE CONTROL RECORD**

<b>ISSUE NO.</b>	<b>REASON FOR CHANGE</b>	<b>DATE ISSUED</b>
FS170105N019	Original release	Apr. 24, 2017



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## 1. CERTIFICATION

<b>FCC ID:</b>	2ADYO-S0010X
<b>PRODUCT:</b>	α Base Station
<b>BRAND NAME:</b>	sensoro
<b>MODEL NO.:</b>	BST-10B
<b>ADDITIONAL NO.:</b>	N/A
<b>TEST SAMPLE:</b>	Engineering Sample
<b>APPLICANT:</b>	Beijing Sensoro Technology Co.,Ltd.
<b>STANDARDS:</b>	FCC Part 2 (Section 2.1091)
	KDB 447498 D01
	IEEE C95.1



## 2. RF EXPOSURE LIMIT

### 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)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

## 3. MPE CALCULATION FORMULA

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

where

Pd = power density in mW/cm<sup>2</sup>

Pout = 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

## 4. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.



## 5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Transmitter Circuit	Peak Gain (dBi)	Antenna Type
BT-LE(GFSK)	0.9	Integral PCB Antenna
CSS	5	External Antenna

## 6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
2402-2480(BT-LE)	1.091	0.9	20	0.000267	1.0
902-928MHz(For 1276)	154.17	5	20	0.09699	0.6
902-928MHz(For 1301)	409.26	5	20	0.25747	0.6

### CONCLUSION:

The CSS and BT-LE can transmit simultaneously, the formula of calculated the MPE is:

$$CPD1 / LPD1 + CPD2 / LPD2 + \dots \text{etc.} < 1$$

**CPD = Calculation power density**

**LPD = Limit of power density**

$$(0.000267/1)+(0.09699/0.6)+(0.25747/0.6)= 0.591 < 1, \text{ which is less than the "1" limit.}$$

--- END ---