



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 DepartmentApproved by Glyn He
Supervisor / EMC Department

Date: Apr. 24, 2017

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Bureau Veritas Shenzhen Co., Ltd.
Dongguan BranchNo. 34, Chenwulu Section, Guantai Rd., Houjie
Town, Dongguan City,
Guangdong 523942, ChinaTel: +86 769 8593 5656
Fax: +86 769 8593 1080
Email: customerservice.dg@cn.bureauveritas.com



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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FS170105N019	Original release	Apr. 24, 2017

Bureau Veritas Shenzhen Co., Ltd.
Dongguan Branch

No. 34, Chenwulu Section, Guantai Rd., Houjie
Town, Dongguan City,
Guangdong 523942, China

Tel: +86 769 8593 5656
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Email: customerservice.dg@cn.bureauveritas.com



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1. CERTIFICATION

FCC ID:	2ADYO-S0010X
PRODUCT:	α Base Station
BRAND NAME:	sensoro
MODEL NO.:	BST-10B
ADDITIONAL NO.:	N/A
TEST SAMPLE:	Engineering Sample
APPLICANT:	Beijing Sensoro Technology Co.,Ltd.
STANDARDS:	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 ²)	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

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

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 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 ²)	LIMIT (mW/cm ²)
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

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

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