



REPORT No. : SZ17050127S03

# RF EXPOSURE EVALUATION REPORT

**APPLICANT** : FenSens, Inc  
**PRODUCT NAME** : Tap QuickLaunch Button  
**MODEL NAME** : FEN-BTTNV1  
**TRADE NAME** : FenSens  
**BRAND NAME** : FenSens  
**IC** : 22794-BTTNV1  
**STANDARD(S)** : RSS-102, Issue 5-2015  
**ISSUE DATE** : 2017-07-03

**SHENZHEN MORLAB COMMUNICATIONS TECHNOLOGY Co., Ltd.**

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Change History		
Issue	Date	Reason for change
1.0	2017-07-03	First edition



## TEST REPORT DECLARATION

Applicant	FenSens, Inc
Applicant Address	383 E. Laurel Rd, Bellingham, WA 98226, USA
Manufacturer	NOA Labs Ltd.
Manufacturer Address	709 Bldg C HuangDu GuangChang Building YiTian Road, Futian District, Shenzhen, 518000, GuangDong, China
Product Name	Tap QuickLaunch Button
Model Name	FEN-BTTNV1
Brand Name	FenSens
HW Version	V1.0.0
SW Version	V1.0.2
Test Standards	RSS-102, Issue 5-2015
Issue Date	2017-07-03
SAR Evaluation	Not Required

Tested by : Peng Fuwei  
Peng Fuwei (Test engineer)

Approved by : Peng Huarui  
Peng Huarui (Supervisor)



## 1. TECHNICAL INFORMATION

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

### 1.1. Identification of Applicant

Company Name:	FenSens, Inc
Address:	383 E. Laurel Rd, Bellingham, WA 98226, USA

### 1.2. Identification of Manufacturer

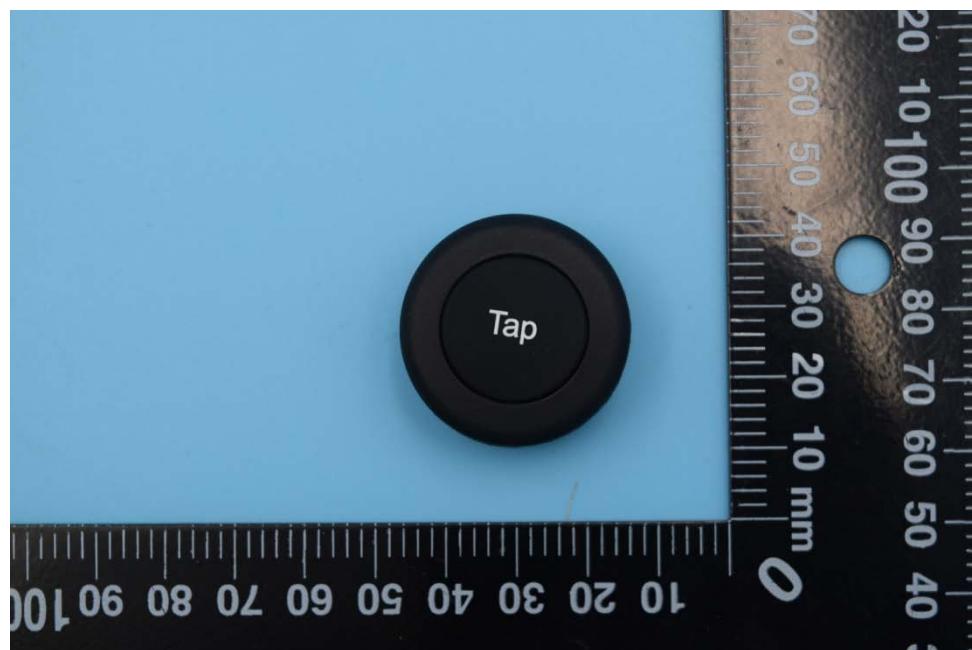
Company Name:	NOA Labs Ltd.
Address:	709 Bldg C HuangDu GuangChang Building YiTian Road, Futian District, Shenzhen, 518000, GuangDong, China

### 1.3. Equipment Under Test (EUT)

Model Name:	FEN-BTTNV1
Trade Name:	FenSens
Brand Name:	FenSens
Hardware Version:	V1.0.0
Software Version:	V1.0.2
Frequency Bands:	Bluetooth 4.1:2402-2480MHz;
Modulation Mode:	Bluetooth 4.1: GFSK;
Antenna type:	PCB Antenna
Development Stage:	-2.49dBi

### 1.3.1. Photographs of the EUT

#### 1. EUT front view



#### 2. EUT rear view





### 1.3.2. 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#	V1.0.0	V1.0.2

### 1.4. Applied Reference Documents

Leading reference documents for testing:

No.	Identity	Document Title
1	<b>RSS-102, Issue 5-2015</b>	Radio Frequency (RF) Exposure Compliance of Radio communication Apparatus (All Frequency Bands)



## 2. MEASUREMENT OF CONDUCTED PEAK OUTPUT POWER

### 1. Bluetooth Peak output power

Band	Channel	Frequency (MHz)	Output Power(dBm)
			GFSK
BT	0	2402	-2.30
	19	2440	-2.19
	39	2480	-1.65

## 3. RF EXPOSURE EVALUATION

According to the section 2.5.1 of RSS-102 Issue 5, SAR evaluation is required if the separation distance between the user and/or bystander and the antenna and/or radiating element of the device is less than or equal to 20 cm, except when the device operates at or below the applicable output power level (adjusted for tune-up tolerance) for the specified separation distance defined in Table 1.

**Table 1: SAR evaluation – Exemption limits for routine evaluation based on frequency and separation distance**

Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of ≤5 mm	At separation distance of 10 mm	At separation distance of 15 mm	At separation distance of 20 mm	At separation distance of 25 mm
≤300	71 mW	101 mW	132 mW	162 mW	193 mW
450	52 mW	70 mW	88 mW	106 mW	123 mW
835	17 mW	30 mW	42 mW	55 mW	67 mW
1900	7 mW	10 mW	18 mW	34 mW	60 mW
<b>2450</b>	<b>4 mW</b>	7 mW	15 mW	30 mW	52 mW
3500	2 mW	6 mW	16 mW	32 mW	55 mW
5800	1 mW	6 mW	15 mW	27 mW	41 mW

When Bluetooth Watch is worn on the hand, BT antenna spacing 0mm from body, the maximum tune-up limit power is **0.71mW<4mW**.

So SAR evaluation is not required for this device.



## 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
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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 \*\*\*\*\*