


# RF EXPOSURE REPORT

Report No.: DDT-B23090413-2E02

<b>Applicant</b>	:	Sensata Technologies (Changzhou) Co., Ltd.
<b>Applicant Address</b>	:	No. 18, Chuangxin Road, Xinbei District, Changzhou City, Jiangsu, China, 213031
<b>Equipment Under Test</b>	:	TPMS Sensor
<b>Model No.</b>	:	NHSS4
<b>Trade Mark</b>	:	
<b>FCC ID</b>	:	2BAW4- NHSS4
<b>Manufacturer</b>	:	Sensata Technologies (Changzhou) Co., Ltd.
<b>Manufacturer Address</b>	:	No. 18, Chuangxin Road, Xinbei District, Changzhou City, Jiangsu, China, 213031

**Issued By:** Tianjin Dongdian Testing Service Co., Ltd.

**Address:** Building D-1, No. 19, Weis Road, Microelectronics Industrial Park, Development Area, Tianjin, China.

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# REPORT

## Table of Contents

1.	General information.....	5
1.1.	Description of Equipment.....	5
1.2.	Assess laboratory.....	5
2.	RF Exposure Evaluation .....	6
2.1.	Requirement.....	6
2.2.	Estimation result.....	6

## Test Report Declare

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**Standard Used:**

KDB447498 D01 General RF Exposure Guidance v06

**We Declare:**

The equipment described above is tested by Tianjin Dongdian Testing Service Co., Ltd and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Tianjin Dongdian Testing Service Co., Ltd is assumed of full responsibility for the accuracy and completeness of these tests.

After test and evaluation, our opinion is that the equipment provided for test compliance with the requirement of the above FCC standards.

<b>Report No:</b>	DDT-B23090413-2E02		
<b>Date of Receipt:</b>	Feb. 27, 2024	<b>Date of Test:</b>	Feb. 28, 2024 ~ Mar. 06, 2024

**Prepared By:**

Novak Wei

**Novak Wei/Engineer****Approved By:**

Aaron Zhang

**Aaron Zhang /Manager**

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Tianjin Dongdian Testing Service Co., Ltd.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

## Revision History

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	Mar. 07, 2024	

## 1. General information

### 1.1. Description of Equipment

EUT Description	: TPMS Sensor
Model Number	: NHSS4
Serial Number	: N/A
Hardware Version	: V01
Software Version	: V01
Sample Type	: Vehicle Device
EUT function description	: Please refer to user manual of this device
Power supply	: Internal 3V DC 2032 Lithium battery power supply
Support Frequency	: 433.92 MHz
Max. Power	: 59.34 dBμV/m@3m (Test result)
Max. EIRP	: -47.6 dBm/0.000174(mW) (Calculate result)
Max. ERP	: -49.75 dBm/0.0001 (mW) (Calculate result)
Conducted Power	: -31.92 dBm/0.00625(mW) (Calculate result)
Type of Modulation	: FSK
TX. Antenna Gain	: Max peak gain -17.83 dbi
Antenna Type	: Internal stamping antenna

Note:

$$\text{EIRP(W)} = (E1 \cdot d)^2 / 30$$

$$\text{EIRP(dBm)} = 10 \log_{10}(\text{EIRP(W)}) + 30 = E2 + 20 \log(d) - 104.8$$

$$\text{Conducted Power} = \text{Max. EIRP} - \text{Antenna Gain}$$

E1: Electric field strength in V/m

E2: Electric field strength in dBμV/m

d: measurement distance in m

### 1.2. Assess laboratory

Tianjin Dongdian Testing Service Co., Ltd.

Address: Building D-1, No. 19, Weisi Road, Microelectronics Industrial Park Development Area,  
Tianjin, China., 300385

Tel: +86-22-58038033, <http://www.ddttest.com>, Email: ddt@dgdtdt.com

**NVLAP** (National Voluntary Laboratory Accreditation Program) CODE: 500036-0

**CNAS** (China National Accreditation Service for Conformity Assessment) CODE: L13402

**FCC** Designation Number: CN5004; FCC Test Firm Registration Number: 368676

**ISED** (Innovation, Science and Economic Development Canada) Company Number: 27768

Conformity Assessment Body Identifier: CN0125

**VCCI** Facility Registration Number: C-20089, T-20093, R-20125, G-20122

## 2. RF Exposure Evaluation

### 2.1. Requirement

Per § 1.1307(b)(3)(i)(A), a single RF source is *exempt RF device* (from the requirement to show data demonstrating compliance to RF exposure limits, as previously mentioned) if the available maximum time-averaged power is no more than 1 mW, regardless of separation distance.

This exemption applies to all operating configurations and exposure conditions, for the frequency range 100 kHz to 100 GHz, regardless of fixed, mobile, or portable device exposure conditions.

This is a standalone exemption, and it cannot be applied in conjunction with any other test exemption.

### 2.2. Estimation result

Mode	Band	EIRP Tune-up (dBm)	EIRP Tune-up (mW)	Conducted Power (dBm)	Conducted Power (mW)
Transmitter Emissions	433.92MHz	-47	0.0002	-31.92	0.0016

Conclusion: No SAR and evaluation of exposure required since transmitter power is below FCC threshold 1mW.

END OF REPORT