

## RF EXPOSURE REPORT

|                             |   |                                                           |
|-----------------------------|---|-----------------------------------------------------------|
| <b>Applicant</b>            | : | HANSHOW PTE. LTD.                                         |
| <b>Address</b>              | : | 138 ROBINSON ROAD #02-33 OXLEY TOWER<br>SINGAPORE(068906) |
| <b>Equipment under Test</b> | : | electronic shelf label                                    |
| <b>Model No.</b>            | : | Nebular Ultra-160WQ-N                                     |
| <b>Trade Mark</b>           | : | N/A                                                       |
| <b>FCC ID</b>               | : | 2BPF3-NU-160W                                             |
| <b>Manufacturer</b>         | : | HANSHOW PTE. LTD.                                         |
| <b>Address</b>              | : | 138 ROBINSON ROAD #02-33 OXLEY TOWER<br>SINGAPORE(068906) |
| <b>Report No.</b>           | : | LS-R25122228-13F03                                        |
| <b>Issue Date</b>           | : | Feb. 10, 2026                                             |

LabSure Testing Services (Tianjin) Co., Ltd.



## TABLE OF CONTENTS

|      |                               |   |
|------|-------------------------------|---|
|      | Test report declares.....     | 3 |
| 1.   | General information .....     | 5 |
| 1.1. | Description of Equipment..... | 5 |
| 1.2. | Assess laboratory .....       | 6 |
| 2.   | RF Exposure Evaluation .....  | 7 |
| 2.1. | Requirement .....             | 7 |
| 2.2. | Estimation result .....       | 7 |

## TEST REPORT DECLARE

|                             |   |                                                           |
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**Standard Used:** Code of Federal Regulations 47 Subchapter A, Part 1, Subpart 1 §1.13107.

**We Declare:**

The equipment described above is tested and assessed by LabSure Testing Services (Tianjin) Co., Ltd. and in the configuration assessed the equipment complied with the standards specified above. The tested and assessed results are contained in this test report and LabSure Testing Services (Tianjin) Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these assessments.

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

|                         |                    |                      |                               |
|-------------------------|--------------------|----------------------|-------------------------------|
| <b>Report No:</b>       | LS-R25122228-13F03 |                      |                               |
| <b>Date of Receipt:</b> | Feb. 02, 2026      | <b>Date of Test:</b> | Feb. 02, 2026 ~ Feb. 10, 2026 |

**Prepared By:**

*Sunny Zhang*

**Sunny Zhang/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 LabSure Testing Services (Tianjin) 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 | Feb. 10, 2026 |            |
|      |               |               |            |

## 1. General information

### 1.1. Description of Equipment

|                          |                                               |
|--------------------------|-----------------------------------------------|
| EUT* Name                | : electronic shelf label                      |
| Model Number             | : Nebular Ultra-160WQ-N                       |
| EUT function description | : Please reference user manual of this device |
| Power Supply             | : DC 3V by Polymer Li-ion built-in battery    |
| Radio Specification      | : 2.4G SRD                                    |
| Operation Frequency      | : 2402 MHz - 2480 MHz                         |
| Modulation               | : GFSK                                        |
| Data Rate                | : 500k bps                                    |
| Antenna Type             | : PCB antenna 1, maximum PK gain: -1.1 dBi    |
| Exposure category        | : General population/uncontrolled environment |
| Device Type              | : Portable Device                             |

|                                       |                                               |
|---------------------------------------|-----------------------------------------------|
| EUT* Name                             | : electronic shelf label                      |
| Test Model Number                     | : Nebular Ultra-160WQ-N                       |
| EUT function description              | : Please reference user manual of this device |
| Power Supply                          | : DC 3V by Polymer Li-ion built-in battery    |
| Radio Specification                   | : NFC                                         |
| Wireless charging Operation frequency | : 13.56MHz                                    |
| Number of Channel                     | : 1                                           |
| Antenna Type                          | : Loop antenna                                |

## 1.2. Assess laboratory

LabSure Testing Services (Tianjin) Co., Ltd.

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Tel: +86-22-58038033, [www.lab-sure.com](http://www.lab-sure.com), E-mail: [labsure@lab-sure.com](mailto:labsure@lab-sure.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

According 2.2.1 1-mW Test Exemption for Multiple Sources of 447498 D04 Interim General RF Exposure Guidance v01

As discussed in § 1.1307(b)(3)(ii)(A), the 1-mW exemption intended for single transmitters maybe also applied to simultaneous transmission conditions, within the same host device, according one of the following criteria:

- When maximum available power each individual transmitting antenna within the same time averaging period is  $\leq 1$  mW, and the nearest parts of the antenna structures of the simultaneously operating transmitters are separated by at least 2 cm.
- When the aggregate maximum available power of all transmitting antennas is  $\leq 1$  mW in the same time-averaging period.

### 2.2. Estimation result

According ANSI C63.10-2020, Convert the electric field strength to an equivalent EIRP using the following relationship:

$$\text{EIRP} = E + 20\log(d) - 104.8$$

where

E is the electric field strength in dB $\mu$ V/m

EIRP is the equivalent isotropically radiated power in dBm

d is the specified measurement distance in m

2.4G SRD

| Mode      | Frequency (MHz) | Maximum AV Field Strength (dB $\mu$ V/m) | EIRP (dBm) |
|-----------|-----------------|------------------------------------------|------------|
| GFSK Ant1 | 2402            | 73.51                                    | -21.72     |
| GFSK Ant1 | 2441            | 79.30                                    | -15.93     |
| GFSK Ant1 | 2480            | 73.07                                    | -22.16     |

Max turn-up EIRP is -15dBm=0.0316mW

NFC

| Mode    | Frequency (MHz) | Maximum PK Field Strength (dB $\mu$ V/m) | EIRP (dBm) |
|---------|-----------------|------------------------------------------|------------|
| Tx mode | 13.56MHz        | 50.62                                    | -44.61     |

Max turn-up EIRP is -44dBm=0.00004mW

NFC+2.4G=0.0316+0.00004=0.03164<1mW

Conclusion: The measurement results comply with Code of Federal Regulations 47 Subchapter A, Part 1, Subpart 1 §1.1307, regardless of separation distance.

**END OF REPORT**