

# TEST REPORT

**Report No.:** 8330EU121402W4

**Applicant:** Dakota Lithium Batteries

**Address:** 225 S. LUCILE ST. SEATTLE, WA 98108, the US

**Product Name:** PORTABLE POWER STATION

**Model No.:** PS2400

**Trademark:** N/A

**FCC ID:** 2BDF8PS2400V2400A

**Test Standard(s):** 47 CFR Part 1 Subpart I Section 1.1310  
47 CFR Part 2, Subpart J, Section 2.1091

**Test Result:** Pass

**Date of Receipt:** May 14, 2025

**Test Date:** May 14, 2025 – May 30, 2025

**Date of Issue:** Jun. 10, 2025

**ISSUED BY:**

SHENZHEN EU TESTING LABORATORY LIMITED



**Prepared by:**



Mikey Zhu/ Engineer

**Reviewed and Approved by:**



Sally Zhang/ Manager

### Revision Record

| Report Version | Issued Date   | Description | Status |
|----------------|---------------|-------------|--------|
| V0             | Jun. 10, 2025 | Original    | Valid  |
|                |               |             |        |
|                |               |             |        |



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## 2 General Information

### 2.1 Applicant Information

|           |  |
|-----------|--|
| Applicant | Dakota Lithium Batteries                   |
| Address   | 225 S. LUCILE ST. SEATTLE,WA 98108, the US |

### 2.2 Manufacturer Information

|              |   |
|--------------|---|
| Manufacturer | Huizhou Intelligent Energy Co., Ltd.  |
| Address      | 8-9/F, Building E2-1, Qunyi Intelligent Manufacturing Industrial Park, No.1 Xingyuan South Road, Zhongkai High-tech Zone, HuiZhou |

### 2.3 Factory Information

|         |   |
|---------|---|
| Factory | Huizhou Intelligent Energy Co., Ltd.  |
| Address | 8-9/F, Building E2-1, Qunyi Intelligent Manufacturing Industrial Park, No.1 Xingyuan South Road, Zhongkai High-tech Zone, HuiZhou |

### 2.4 General Description of E.U.T.

|                                      |  |
|--------------------------------------|--|
| Product Name                         | PORTABLE POWER STATION   |
| Model No. Under Test                 | PS2400   |
| List Model No.                       | N/A  |
| Description of Model differentiation | N/A  |
| Rating(s)                            | Refer to the following detailed table.   |
| Product Type                         | <input checked="" type="checkbox"/> Mobile<br><input type="checkbox"/> Portable<br><input type="checkbox"/> Fix Location |
| Test Sample No.                      | -1/2(Normal Sample), -2/2(Engineering Sample)  |
| Hardware Version                     | N/A  |
| Software Version                     | N/A  |
| Remark                               | For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.        |

Detailed table:

## PORTABLE POWER STATION

- Type: PS2400
- Batch Code: IGM2400-0425
- Battery Capacity: 51.2V, 40Ah/2048Wh
- AC Input: 100V-130V~12.5A, 60Hz, 1500W
- PV Input: DC 12V-75V=25A, 800W Max
- AC Output ×4: Pure Sine Wave 120V~60Hz, 2400W
- AC Parallel Interface: 2400W
- After Being Connected AC Output: 4800W
- DC Output ×2 + Cigarette Lighter Socket Output: Total 12V=10A
- USB-A Output ×2: 5V=3A, 9V=2A, 12V=1.5A, 18W Max
- USB-C Output ×2: 5V/9V/12V/15V/20V=3A, 20V=5A, 100W Max
- Wireless Charge: 10W
- Operating Temp: 14 to 104°F (-10 to 40°C)
- Charging Temp: 32 to 104°F (0 to 40°C)

DAKOTA LITHIUM BATTERIES MEET U.N. 38.3 STANDARDS FOR QUALITY & PERFORMANCE, AND CONFORM TO U.N. 38.3/DOT SHIPPING REGULATIONS FOR AIR, TRAIN, MARINE, AND GROUND TRANSPORTATION. BUILT WITH GRADE A LIFEPO4 CELLS TESTED PER IEC62133 STANDARDS FOR SAFETY AND PERFORMANCE



Made in China

ALL BATTERIES INCLUDE AN ACTIVE BMS (BATTERY MANAGEMENT SYSTEM) PROTECTION CIRCUIT THAT HANDLES CELL BALANCING, LO VOLTAGE CUTOFF, HIGH VOLTAGE CUTOFF, SHORT CIRCUIT PROTECTION AND TEMPERATURE PROTECTION FOR INCREASED PERFORMANCE AND LONGER LIFE

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. FCC ID: 2BDF8PS2400V2400A



MADE IN CHINA



Li-ion

### ⚠ WARNING!

- Do not short-circuit the unit. To avoid short-circuiting, keep the unit away from all metal objects (e.g. coins, hair-pins, keys, etc.).
- Do not heat the unit, or dispose of it in fire, water or other liquids. Keep away from high temperatures.
- Do not expose the unit to direct sunlight. Keep away from high humidity, dusty places.
- Do not disassemble or reassemble this unit.
- Do not drop and place heavy objects on, or allow strong impact to this unit.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- The unit may become hot when charging. This is normal. Be careful when handling.
- Use the unit properly to avoid electronic shock.
- The product is only used for emergency power station, it can not replace the standard DC or AC power of household appliances or digital products.
- Do not overcharge the internal battery. See Instruction Manual.

### ⚠ ACHTUNG!

- Schließen Sie das Gerät nicht kurz. Um Kurzschlüsse zu vermeiden, halten Sie das Gerät von allen Metallgegenständen (z.B. Münzen, Haarnadeln, Schlüssel usw.) fern.
- Erhitzen Sie das Gerät nicht und werfen Sie es nicht in Feuer, Wasser oder andere Flüssigkeiten. Von hohen Temperaturen fernhalten.
- Setzen Sie das Gerät keiner direkten Sonneneinstrahlung aus. Von hoher Luftfeuchtigkeit und staubigen Orten fernhalten.
- Zerlegen Sie dieses Gerät nicht und bauen Sie es nicht wieder zusammen.
- Lassen Sie das Gerät nicht fallen, stellen Sie keine schweren Gegenstände darauf und setzen Sie es keinen starken Stößen aus.
- Dieses Gerät ist nicht für die Verwendung durch Personen (einschließlich Kinder) mit eingeschränkter körperlicher, sensorischer oder geistiger Fähigkeiten oder mangelnder Erfahrung und Wissen bestimmt, es sei denn, sie werden von einer für ihre Sicherheit verantwortlichen Person beaufsichtigt oder in die Verwendung des Geräts eingewiesen.
- Kinder sollten beaufsichtigt werden, um sicherzustellen, dass sie nicht mit dem Gerät spielen.
- Das Gerät kann beim Laden heiß werden. Das ist normal. Seien Sie vorsichtig bei der Handhabung.
- Verwenden Sie das Gerät ordnungsgemäß, um einen Stromschlag zu vermeiden.
- Das Produkt wird nur für Notstromanlagen verwendet und kann nicht die Standard-Gleich- oder Wechselstromversorgung von Haushaltsgeräten oder digitalen Produkten ersetzen.
- Überladen Sie den internen Akku nicht. Siehe Bedienungsanleitung.

- Date Code: ▮

## 2.5 Technical Information of E.U.T.

|                                   |   |
|-----------------------------------|---|
| Network and Wireless Connectivity | Bluetooth (BLE)<br>WiFi 2.4G: 802.11b, 802.11g, 802.11n(HT20/40)<br>Wireless Power Transfer |
|-----------------------------------|---|

The requirement for the following technical information of the EUT was tested in this report:

|                     |   |
|---------------------|---|
| Technology          | <b>WPT</b>  |
| Operating Frequency | 110.1-205KHz  |
| Modulation Type     | FSK   |
| Antenna Type        | Coil Antenna  |
| Antenna Gain(Peak)  | 0 dBi   |
| Remark              | The above information is declared by the applicant, EU-LAB is not responsible for the information accuracy provided by the applicant. |

### 3 Test Summary

#### 3.1 Test Standard

The tests were performed according to following standards:

| No. | Identity                                 | Document Title   |
|-----|--|--|
| 1   | 47 CFR Part 1 Subpart I Section 1.1310   | Radio frequency radiation exposure limits.   |
| 2   | 47 CFR Part 2, Subpart J, Section 2.1091 | Radiofrequency radiation exposure evaluation: mobile devices                           |
| 3   | KDB 680106 D01v04                        | RF exposure consideration for low power consumer wireless power transfer applications. |

Remark:

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product maybe which result in lowering the emission/immunity should be checked to ensure compliance has been maintained.

#### 3.2 Test Verdict

| No. | Description            | FCC Part No.   | Verdict | Remark |
|-----|------------------------|--|---------|--------|
| 1   | RF Exposure Evaluation | FCC 1.1310<br>FCC 2.1091<br>KDB 680106 D01 Wireless Power Transfer v04 | Pass    | --     |

#### 3.3 Test Laboratory

|                               |  |
|-------------------------------|--|
| Test Laboratory               | Shenzhen EU Testing Laboratory Limited   |
| Address                       | 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China |
| Designation Number            | CN1368   |
| Test Firm Registration Number | 952583   |

## 4 Test Configuration

### 4.1 Test Environment

During the measurement, the normal environmental conditions were within the listed ranges:

|                            |                         |                |
|----------------------------|-------------------------|----------------|
| Relative Humidity          | 30% to 60%              |                |
| Atmospheric Pressure       | 86 kPa to 106 kPa       |                |
| Temperature                | NT (Normal Temperature) | +15°C to +35°C |
| Working Voltage of the EUT | NV (Normal Voltage)     | 120 VAC, 60Hz  |

### 4.2 Test Equipment

| Equipment                                    | Manufacturer | Model No | Serial No | Cal Date   | Cal Due Date |
|--|--------------|----------|-----------|------------|--------------|
| Electric and Magnetic Field Probe - Analyzer | Narda        | EHP-200A | EE-405    | 2025/02/14 | 2026/02/13   |

### 4.3 Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned bellow was evaluated respectively.

| No. | Description                            | Remark |
|-----|--|--------|
| TM1 | Wireless Output (10W)--AC Power Supply |        |
| TM2 | Wireless Output (10W)--DC Power Supply |        |
| TM3 | Standby                                |        |

Note:

1. EUT supports empty load, half load, full load working at the same time, so the all conditions have been tested. It is found that TM1 full load is the worst mode, and the data in the report only reflects the worst mode.

### 4.4 Measurement Uncertainty

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

| Test Item                               | Measurement Uncertainty |
|---|-------------------------|
| Magnetic field measurements(3kHz~10MHz) | ±14.6%                  |
| Electric field measurements(3kHz~10MHz) | ±17.3%                  |



## 5 RF Exposure Evaluation

### 5.1 Test Requirement

§1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in §1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of FCC part 2.1093 of this chapter.

**Table 1 to §1.1310(e)(1) - Limits for Maximum Permissible Exposure (MPE)**

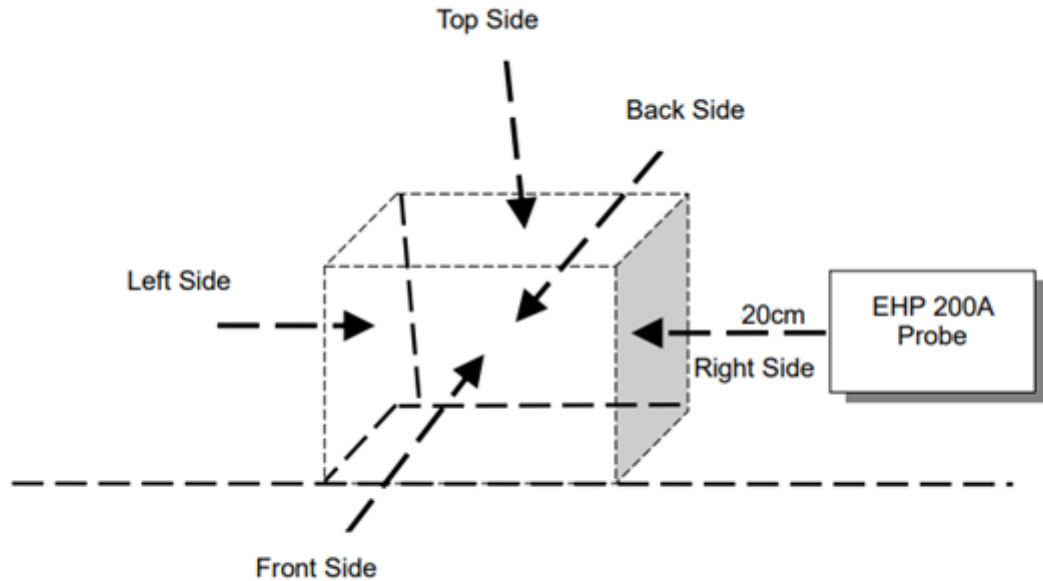
| Frequency range<br>(MHz)                                       | Electric field strength<br>(V/m) | Magnetic field strength<br>(A/m) | Power density<br>(mW/cm <sup>2</sup> ) | Averaging time<br>(minutes) |
|--|----------------------------------|----------------------------------|--|-----------------------------|
| <b>(A) Limits for Occupational/Controlled Exposures</b>        |                                  |                                  |  |                             |
| 0.3-3.0  | 614                              | 1.63                             | *(100)                                 | 6                           |
| 3.0-30   | 1842/f                           | 4.89/f                           | *(900/f <sup>2</sup> )                 | 6                           |
| 30-300   | 61.4                             | 0.163                            | 1.0                                    | 6                           |
| 300-1500   | /                                | /                                | f/300                                  | 6                           |
| 1500-100,000   | /                                | /                                | 5                                      | 6                           |
| <b>(B) Limits for General Population/Uncontrolled Exposure</b> |                                  |                                  |  |                             |
| 0.3-1.34   | 614                              | 1.63                             | *(100)                                 | 30                          |
| 1.34-30  | 824/f                            | 2.19/f                           | *(180/f <sup>2</sup> )                 | 30                          |
| 30-300   | 27.5                             | 0.073                            | 0.2                                    | 30                          |
| 300-1500   | /                                | /                                | f/1500                                 | 30                          |
| 1500-100,000   | /                                | /                                | 1.0                                    | 30                          |

F=frequency in MHz

\*=Plane-wave equivalent power density

RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).

## 5.2 Test Setup



Note: Measurements should be made from all sides and the top of the primary/client pair, with the 20cm measured from the center of the probe(s) to the edge of the device.

- 1) The RF exposure test was performed in anechoic chamber.
- 2) The measurement probe was placed at test distance (20cm) which is between the edge of the charger and the geometric center of probe.
- 3) The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E, F) were completed.
- 4) The EUT was measured according to the dictates of KDB 680106 D01 v04.

### 5.3 Evaluation Result

Test Condition: Test Mode 1 operating with client device (1% battery status of client device)

| Test Position | E-field (V/m) |       |                     | H-field (A/m) |       |                     |
|---------------|---------------|-------|---------------------|---------------|-------|---------------------|
|               | Measurement   | Limit | Max. Percentage (%) | Measurement   | Limit | Max. Percentage (%) |
| Top           | 6.1237        | 614   | 0.84%               | 0.2830        | 1.63  | 14.10%              |
| Bottom        | 4.0454        |       |                     | 0.2400        |       |                     |
| Front         | 1.2389        |       |                     | 0.0500        |       |                     |
| Rear          | 2.9836        |       |                     | 0.0890        |       |                     |
| Left          | 3.4141        |       |                     | 0.0930        |       |                     |
| Right         | 2.7973        |       |                     | 0.1850        |       |                     |

Test Condition: Test Mode 1 operating with client device (50% battery status of client device)

| Test Position | E-field (V/m) |       |                     | H-field (A/m) |       |                     |
|---------------|---------------|-------|---------------------|---------------|-------|---------------------|
|               | Measurement   | Limit | Max. Percentage (%) | Measurement   | Limit | Max. Percentage (%) |
| Top           | 5.5949        | 614   | 0.80%               | 0.2264        | 1.63  | 13.84%              |
| Bottom        | 4.6303        |       |                     | 0.1920        |       |                     |
| Front         | 0.7420        |       |                     | 0.0400        |       |                     |
| Rear          | 3.6034        |       |                     | 0.0712        |       |                     |
| Left          | 3.0557        |       |                     | 0.0744        |       |                     |
| Right         | 4.6315        |       |                     | 0.1480        |       |                     |

Test Condition: Test Mode 1 operating with client device (99% battery status of client device)

| Test Position | E-field (V/m) |       |                     | H-field (A/m) |       |                     |
|---------------|---------------|-------|---------------------|---------------|-------|---------------------|
|               | Measurement   | Limit | Max. Percentage (%) | Measurement   | Limit | Max. Percentage (%) |
| Top           | 5.8923        | 614   | 0.82%               | 0.0570        | 1.63  | 20.60%              |
| Bottom        | 5.3454        |       |                     | 0.1900        |       |                     |
| Front         | 0.5540        |       |                     | 0.1460        |       |                     |
| Rear          | 2.4895        |       |                     | 0.0690        |       |                     |
| Left          | 4.0919        |       |                     | 0.0180        |       |                     |
| Right         | 3.8351        |       |                     | 0.2340        |       |                     |

## ANNEX A TEST SETUP PHOTOS

### PHOTO 1

Test Position: Top



## STATEMENT

1. The laboratory guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
2. The report without China inspection body and laboratory Mandatory Approval (CMA) mark has no effect of proving to the society.
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--- End of Report ---